

Министерство образования и науки Российской Федерации
ФГБОУ ВО «Удмуртский государственный университет»
Институт права, социального управления и безопасности
Институт языка и литературы
Кафедра профессионального иностранного языка для специальностей
ИПСУБ

ENGLISH
For Forensic Science Students-2

УЧЕБНОЕ ПОСОБИЕ

Ижевск

2019

УДК 372.881.111.1

ББК 81.2Англ-923

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Рекомендовано к изданию Учебно-методическим советом УдГУ

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English for forensic science students-2: учебное пособие по английскому языку для студентов, обучающихся по программам высшего образования по специальности 40.05.03 «Судебная экспертиза»/ авторы-сост. Ю.Ю. Лапекина, Е.И. Зыкина – УдГУ, Ижевск, 2019.- 70 с.

Настоящее учебное пособие по английскому языку предназначено для студентов специальности 40.05.03 «Судебная экспертиза» и может использоваться в качестве дополнительной литературы для студентов специальности 40.05.02 «Правоохранительная деятельность». Система заданий направлена на усвоение и активизацию лексического материала, формированию социокультурной компетенции и развитие способности к деловому общению и профессиональной коммуникации на английском языке. Темы, включенные в модули, соответствуют учебному плану подготовки судебных экспертов и направлены на достижение воспитательного эффекта и формирования у студентов общекультурных и профессиональных компетенций, определенных в ФГОС ВО.

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ВВЕДЕНИЕ

Настоящее учебное пособие предназначено для студентов, обучающихся по специальности «Судебная экспертиза» и может быть использовано в качестве дополнительной литературы по направлению подготовки «Правоохранительная деятельность», изучающих учебную дисциплину «Иностранный язык (английский)» (форма обучения: очная). Учебник подготовлен в соответствии с учебными планами и рабочими программами по дисциплине «Иностранный язык (английский)» и ФГОС ВО по специальности «40.05.03» – Судебная экспертиза, квалификация «судебный эксперт» и направлению подготовки «40.05.02» - Правоохранительная деятельность, квалификация (степень) «специалист».

Основной целью курса «Иностранный язык (английский)» является формирование у студентов иноязычной коммуникативной компетенции, как основы профессиональной деятельности на иностранном языке. Это предполагает решение следующих задач обучения: освоение обучаемыми языкового материала, в том числе расширение словарного запаса за счет лексики по специальности; совершенствование навыков чтения литературы по специальности на английском языке с целью получения профессионально значимой информации; совершенствование навыков устной и письменной речи, ориентирование на коммуникацию в профессионально-деловой сфере деятельности будущих судебных экспертов и специалистов в области правоохранительной деятельности; развитие навыков работы с профессиональной информацией на иностранном языке и способами ее структурирования (составление интеллектуальной карты, конспектов, аннотирование, реферирование, перевод литературы по специальности. Пособие не предусматривает обучение грамматике, так как введение его в учебный процесс происходит в III семестре, т.е. базовая грамматика уже изучена.

Данное учебное пособие нацелено на совершенствование и дальнейшее развитие навыков и умений чтения, говорения, аудирования, письма, перевода. Трудоемкость дисциплины для специальности «Судебная экспертиза» на 2 курсе составляет 5 зачетных единиц, или 180 академических часов, включающих 90 аудиторных часов и 54 часа самостоятельной работы для очной формы обучения. Представленная работа “English for forensic science students-2” является продолжением серии “English for forensic science students-1” и рассчитана на 3-4 семестры обучения дисциплине.

Учебное пособие состоит из 4 модулей, содержание которых охватывает основные аспекты деятельности судебного эксперта и криминалиста за рубежом в сфере профессиональной коммуникации. В конце учебника представлены раздел с вопросами для повторения изученного материала, дополнительные задания, материалы для чтения и извлечения информации и перевода.

UNIT I. WHAT IS FORENSIC SCIENCE?

⊕ Warm-up

1. Discuss the following questions:

- 1) What is forensic science?
- 2) Why is forensic science popular?
- 3) Why do people need forensic science?

2. Answer the questions using the pictures and key words given below.



justice to investigate to find a criminal to help the police
to collect evidence to analyze to take photos

⊕ Vocabulary

Activity 1. Fill in the table. Not all forms will be used for each word. Use dictionary, if necessary. Translate the words into Russian.

Verb	Noun (thing or concept)	Noun(person)	Adjective
	science		scientific
	justice		
		investigator	
to prove			
to identify			
		a suspect	

Activity 2. Read the word combinations and translate them into Russian.

An investigation of a crime, to collect evidence, to be collected by the field officers, prove or disprove claims, to study fingerprints, to identify and incriminate suspects, scientific means, to administer justice, forensic scientists, DNA profiles, physical evidence.

Activity 3. Choose the correct word from the list to complete each sentence. One word is odd. Translate the sentences into Russian.

science	prove	suspected	suspect
justify	suspicious	collecting	identify
investigating	incriminates	incriminate	scientific
proof	justice	scientists	investigation

- 1) Forensic _____ is an umbrella term that has various areas under it.
- 2) There is not enough evidence to prove such _____ .
- 3) The state police are _____ the incident.
- 4) Can you _____ that you were at home at the time of the attack?
- 5) In Roman society, _____ was administered in the market place.
- 6) Both men had originally been _____ of Brown's murder.
- 7) A 32-year-old man from London is the prime _____ in the murder _____. It will be conducted by _____ means.
- 8) The police knew she was guilty, but they had no _____.
- 9) Police hope that a member of the public will be able to _____ a man seen acting suspiciously a few hours before the murder took place.
- 10) Forensic _____ are skilled in _____ evidence and analyzing it.
- 11) These tapes _____ a number of well-known politicians.
- 12) Evidence found at the crime scene _____ the defendant.
- 13) They are instructed to report about any _____ activity in the neighborhood.

⊕ Reading and language study 1

Activity 4. Study the vocabulary and guess what the text is about.



forensics – криминалистика, судебная экспертиза,	blood splatter – брызги крови
криминалистическая экспертиза; эксперты, криминалисты;	fibre – волокно, ворсинка
umbrella term – многозначный термин;	debris – обломки, останки, осколки
crime scene – место преступления;	turn up on the suspects` clothes, possessions, or ear wax – оказаться на одежде, имуществе
car movement – движение автомобиля	или в ушной сере подозреваемых

Activity 5. Read the text to check your guesses.

What is forensic science?

Forensics is the term given to an investigation of a crime using scientific means. It is also used as a synonym for "related to courts". The word forensic is derived from the Latin word "forum", which means "the market place". In Roman society, justice was administered in the market place. We continue to use the word forum for a public speaking place and have adopted the word forensic as the name for anything related to the administration of justice.

There are many professional fields within forensic science: chemistry (chromatography, pH and other chemical tests); biology (fingerprinting, hairs, DNA testing etc); physical science (blood spatter analysis, ballistics, car movements in car accidents). Each professional field in forensic science is based on a common type of evidence which is often found at crime scenes.

Forensic science can be used to identify and incriminate suspects, by studying fingerprints, blood types or DNA profiles for example. It can also be used to prove or disprove claims made by suspects about an incident. For example, if a suspect claims they were never at the crime scene, but unique fibres or debris turn up on the suspects` clothes, possessions, or in their ear wax, then police can prove that the suspect is lying.

Forensic science is an umbrella term that has various areas under it. When a crime is committed and the forensic team is called in, there are many experts who cover their specialized fields. Although all these people could be considered forensic scientists, they have specific areas that they work in. There are two main areas of forensic science and these are the minimum requirements for a criminal investigation. Field officers are technicians who visit the scene of a crime and collect the physical evidence that may be related to the crime. They also document and record the scene by taking photographs and videos. Lab officers are technicians who analyze and complete tests on the evidence collected by the field officers [10].

Activity 6. Scan the text and find out the definitions.

Forensics, forensic science, forensic scientists, field officers, lab officers.

Activity 7. Put the words into the correct order and answer the questions.

- 1) what /the /forensic /definition /of /is/ science?
- 2) word /is /this /derived/ where /from?
- 3) where /justice/ was /administered/ in/ Roman /society?
- 4) are/the/fields/what/specialist/forensic/within/ science?
- 5) what/forensic/be/can/science/used/for?

Activity 8. Revise the text and decide if the following statements are true, false or doesn't say.

- 1) In Roman society, justice was administered in the market place.
- 2) There are a few professional fields within forensic science.
- 3) Forensic science can be used to prove claims made by suspects about an incident.
- 4) The only job of field officers is to visit the scene of a crime and collect the physical evidence.
- 5) Technicians who analyze and complete tests on the evidence are called lab officers.
- 6) Forensic scientists not always manage to identify a criminal.

Think about your own 'true, false or doesn't say' statements.

- 7) _____
- 8) _____
- 9) _____

Activity 9. Find English equivalents to the following words and word combinations.

- 1) происходить из, создаваться на основе чего-либо -
- 2) инкриминация подозреваемых -
- 3) баллистика -
- 4) химические тесты -
- 5) изучение отпечатков пальцев -
- 6) опровергнуть заявления подозреваемых -
- 7) документировать -
- 8) место преступления -
- 9) профиль ДНК -
- 10) криминалистическая команда -

Activity 10. Make up as many sentences as possible using the table below.

S	V	O	P	details
Forensic scientists A field officer A lab officer The police A suspect Technicians A forensic team Forensic science	identify work collect document arrive analyze know prove disprove record take incriminate use find	- photos - the scene - a possible suspect - potential evidence - evidence - DNA profile - tests - scientific means - fibres or debris	- in investigating - at the crime scene - in the market place - on the suspects clothes - in car accidents	for a criminal investigation related to the crime by the field officers

Activity 11. Translate the sentences into English.

- 1) Он лег на кровать и с интересом начал читать книгу о баллистике.
- 2) Он нанял частного детектива, чтобы расследовать это дело.
- 3) Преступник был очень осторожен, чтобы не оставить свои отпечатки.
- 4) Полиция вскоре прибыла на место преступления.
- 5) ДНК-тестирование помогает определить, кто совершил преступление.
- 6) Вчера поздно вечером было арестовано двое подозреваемых.
- 7) Следователь обнаружил брызги крови на его одежде и вещах.
- 8) Пока нет достаточно доказательств, мы не можем вынести приговор.

⊕ Reading and language study 2



Activity 12. Read the text below and divide it into logical parts.

Explain the key idea of each paragraph.

When is forensic science required?

A police officer investigating an incident will seek clarification of three issues. Has a crime been committed? If so, who is responsible? If the responsible person has been traced is there enough evidence to charge the person and support a prosecution? Forensic science can be expected to make a contribution to the clarification of all three issues. In most cases there may be no doubt that a crime has been committed but there are a number of occasions when only a scientific examination of items can inform the investigator that this is the case. For example to support an offence of driving under the influence of drink or drugs a blood sample taken from a motorist will require an accurate analysis not only to establish that alcohol or a drug is present but that any alcohol exceeds a permitted level. Similarly the demonstration of toxic levels of a poison in tissues removed at post-mortem from a body of an individual believed to have died from natural causes will be a strong indication of a crime. If a latent fingerprint is recovered from a crime scene and the criminal's prints are already in a database then the person potentially responsible for that crime may soon be identified. Similarly the existence of a database of DNA profiles may enable identification of an offender who has bled at the scene of violence or who has left other body fluids in a sexual assault. Although specific identification of an offender may not be provided by scientific examination it will enable the investigator to reduce the field of enquiry. The scientific examination will normally be directed towards two aspects: examination of material left on the victim or at the scene which is characteristic of the suspect; examination of the clothing and property of the suspect for the presence of material characteristic of the victim or the scene [9; 11; 15; 16].

Activity 13. Find Russian equivalents to the following words and word combinations.

- 1) to exceed a permitted level -
- 2) the demonstration of toxic levels of a poison in tissues -
- 3) the person potentially responsible for -
- 4) to support an offence -
- 5) to support a prosecution -
- 6) an accurate analysis -
- 7) to enable -
- 8) an offence of driving under the influence of drink or drugs -

Activity 14. Find English equivalents to the following words and word combinations.

- 1) выяснение, прояснение -
- 2) вносить вклад, содействовать -
- 3) вскрытие трупа -
- 4) под воздействием наркотиков -
- 5) научная экспертиза -
- 6) сократить область дознания -
- 7) установить личность подозреваемого -
- 8) естественные причины -

Activity 15. Translate the questions into English and answer them.

- 1) Какие три вопроса выясняются при расследовании преступления?
- 2) Что позволит следователю сократить область дознания?
- 3) Что помогает установить личность преступника?
- 4) На что направлена научная экспертиза?

Activity 16. Skim the text and do a mind map to the text.

⊕ **Youtube corner**

<https://youtu.be/58XsN6XJWQ>

Activity 17. Watch the video "What is forensic science?" and answer the questions.

- 1) Does the word "forensic" refer to the law or crime?
- 2) What scientific fields do forensic scientists specialize in?
- 3) What separate branches of forensic science are talked in this video?

Activity 18. Watch this video again and decide if the following statements are true, false or doesn't say. If it is false, correct the statement.

1. The words "forensic science" and "forensics" have the same meaning.
2. Forensic science is the synonym of forensic examination.
3. There are two independent areas in forensic science: field science and lab science.
4. All forensic scientists can provide fingerprint or handwriting examination.
5. Field scientists are involved in crime scene investigation as well as laboratory experts study and examine physical pieces of evidence found at crime scenes.
6. Medical forensic science includes medical procedures as surgery and examination of patients for signs of disease.
7. All forensic disciplines are applications of these sciences to the court needs and justice system.
8. Due to television shows forensic science become very popular.
9. Forensic science can help in both civil and criminal cases.
10. Checking the validity of signature is an example of using forensics in civil justice.

⊕ Compare & contrast

Activity 19. Read the following definitions of forensic science in Russian and English. Use comparing linking expressions as "like", "both", and "unlike" to answer the question:

Are the definitions of "forensic science" and "forensic expertise" alike or different?

Example: Both sciences are studies which are connected with justice system. Unlike forensic expertise in Russia which is derived from the Latin word "expertus" and means "experienced" and "skilled", forensics is derived from ...

Судебная экспертиза — процессуальное действие и самостоятельная отрасль научного знания, имеющие большое значение в раскрытии и расследовании преступлений.
<https://lib.sale/ugolovnyiy-protsess-uchebnik/201-ponyatie-sudebnoy-74731.html>

Судебная экспертиза - особый вид следственного действия, состоящего из проведения по заданию следователя (дознателя) исследований и дачи заключения экспертом по вопросам, разрешение которых требует специальных знаний в целях установления обстоятельств, подлежащих доказыванию по конкретному делу. (Мишин А.В. Судебная экспертиза в досудебном производстве по уголовному делу: учебное пособие, 2017)

Forensic science is the application of science to criminal and civil laws, mainly—on the criminal side—during criminal investigation, as governed by the legal standards of admissible evidence and criminal procedure. (From Wikipedia)

Forensic examination is the professional activity of a person who is appointed an expert in proceedings which purpose is to study the materials presented and, based on the expert assignment, provide a scientific expert opinion.

(From Forensic Examination Act <https://www.riigiteataja.ee/en/eli/521042014001/consolide>)

⊕ Speaking

Activity 20. Study the pictures presented at "Warm up" and describe them using the active vocabulary.

Activity 21. Study useful vocabulary and dramatize the interview.

Variant 1 (basic).

Student A roles: a senior constable, a forensic lab officer, a medical examiner.

Student B role: a journalist interviewing one of the professionals of forensic science.

Variant 2 (advanced)

Student A roles: a senior constable, a forensic lab officer, a medical examiner.

Student B role: a journalist writing an article about the differences in fields of forensic science.

Interview two professionals, compare and sum up the similarities and differences.

a senior constable	a forensic lab officer
<ul style="list-style-type: none"> -involved in crime scene investigation; -to prevent the contamination of a crime scene / evidence; -to provide an initial interpretation or reconstruction of the crime; -to help detectives/ investigators -to collect fingerprint / DNA evidence; -to photograph victims / crime scenes; -to take statements from victims and etc. 	<ul style="list-style-type: none"> -to specialize in areas of biology, chemistry or physics; -to include the analysis of physical evidence; -bloodstains, fingerprint and footprint analysis; -document analysis as handwriting recognition; -ballistics and DNA profiling; -don` t do field work; -don` t catch criminals; -to determine how a person died and etc.
a medical examiner	
<ul style="list-style-type: none"> -to involve medical procedures; -to perform autopsies and examination of bodies after death; -to analyze blood samples from a victim or suspect; -dentistry, psychiatry and psychology; -forensic pathology; -to determine causes of death and interpret injuries and etc. 	

Activity 22. Discuss and sum up the information from the unit 'What is forensic science?' by completing the table below.

Definitions of forensic science	
Professional fields within forensic science	
The main duties of a forensic team	
The role of forensic science in investigating crimes	

⊕ Develop your skills

Activity 23. Read the information about paraphrasing tips and do the following activities.

PARAPHRASING

What is a PARAPHRASE?
Paraphrasing is a tool to express the original idea in your own words.

When is a PARAPHRASE used?

- It is used when you work with small amounts of information, such as phrases and sentences.
- To give the exact idea of what you have just read.

PARAPHRASING tips

- Use synonyms (except terms).
- Change parts of speech (verb → gerund or participle, noun → verb and etc.).
- Change the Voice (The Active Voice ↔ the Passive Voice)
- Flip the sentence. Move the beginning to the end and the end to the beginning.
- Transform the structure of the sentence by abridging it.

- Learn more at <https://www.scribbr.com/citing-sources/how-to-paraphrase/>

ORIGINAL. Forensics is the term given to *an investigation of a crime using scientific means*.

PARAPHRASE. Forensics is the application of *scientific techniques to a crime investigation*.

ORIGINAL. Forensic botany is *a study of plant life in order to gain information regarding possible crimes*. (From Wikipedia)

PARAPHRASE. Forensic botany is *a science that helps in receiving information regarding offences connected with plants*.

What paraphrasing techniques are used in the examples?

Activity 24. Go to the website the website https://en.wikipedia.org/wiki/Forensic_science and study the part "Subdivisions". Paraphrase ten terms and present your results in class.

⊕ Glossary

What is forensic science?

Basics

- 1) a forensic science / forensics
- 2) a forensic scientist
- 3) justice
- 4) a field science; a field officer, a field technician
- 5) a lab science; a lab officer; a lab technician
- 6) a CSI; an investigator
- 7) a medical examiner; a coroner
- 8) a crime scene

Professional fields within forensic science

- 9) chemistry (chromatography, pH and other chemical tests)
- 10) biology (fingerprinting, hairs, DNA testing etc)
- 11) physical science (blood spatter analysis, ballistics, car movements in car accidents)

Verbs and word combinations

- 12) to analyze and complete tests
- 13) to charge the person
- 14) to collect evidence
- 15) to commit a crime
- 16) to be derived from
- 17) to document; a document
- 18) to find a criminal
- 19) to identify; to identify and incriminate suspects
- 20) to investigate
- 21) to justify
- 22) to lie
- 23) to make a contribution
- 24) to perform autopsies
- 25) to support an offence
- 26) to support the prosecution
- 27) to visit the crime scene
- 28) to record; a record
- 29) to prove; to prove or disprove claims
- 30) to suspect; a suspect

Nouns and word combinations

- 31) assault
- 32) blood; ~ type; ~ sample; ~ splatter; bloodstains
- 33) a body
- 34) debris
- 35) a digital forensic investigation firm
- 36) a DNA profile
- 37) earwax
- 38) evidence; a trace ~; a physical ~
- 39) an examination; forensic ~; handwriting ~
- 40) a fingerprint; ~ examination; ~ analysis
- 41) a fibre
- 42) an incident
- 43) post-mortem
- 44) a statement
- 45) toxic levels of a poison in tissues
- 46) validity of signature
- 47) an umbrella term

Adjectives

- 48) forensic; ~ science, ~ pathology; ~ scientist; ~ discipline; ~lab; ~ examination;
~ expertise
- 49) accurate; an ~ analysis
- 50) related to; ~ courts; ~ the administration of justice; ~ crime)

⊕ Check yourself

Activity 25. Translate the following words and word combinations. Which of them will help you to describe the picture.

- | | |
|------------------------------------------------------------|------------------------------------------|
| 1) forensics | 6) криминалист |
| 2) field science and lab science | 7) сократить область дознания |
| 3) bloodstains, fingerprint and footprint analysis | 8) установить личность подозреваемого |
| 4) to perform autopsies and examination bodies after death | 9) отрасль научного знания |
| 5) to support the prosecution | 10) опровергнуть заявления подозреваемых |



Activity 26. Study the list of questions. How many can you answer?

- 1) What is forensic science?
- 2) Forensic science is the synonym of forensic examination, isn't it?
- 3) Where is term word derived from?
- 4) Where was justice administered in Roman society?
- 5) How did forensic science become very popular?
- 6) Are field officers or laboratory experts involved in crime scene investigation?
- 7) What scientific fields do forensic scientists specialize in?
- 8) What separate branches of forensic science are there?
- 9) What three questions should be answered in investigation?
- 10) What helps to identify the identity of criminal / victim?

Activity 27. Complete the sentences with suitable words.

- 1) (Судебная экспертиза) is (многозначный) term. It refers to an investigation of a crime (при помощи научных методов). It is also used as the name of the (приложение) of scientific knowledge to (юридическим вопросам).
- 2) There are (сотрудники оперативной службы), lab officers and medical examiners.
- 3) What allows (сократить область дознания)?
- 4) Who is involved in (расследование места преступления)?

UNIT II. HISTORICAL BACKGROUND OF FORENSIC SCIENCE

⊕ Warm-up

1. Discuss the following questions:

- 1) When is forensic science required?
- 2) What fields of forensic science do you know?
- 3) How can forensic science help people?
- 4) What Russian (foreign) famous forensic scientists and researchers do you know?

⊕ Vocabulary

Activity 1. Fill in the table. Not all forms will be used for each word. Use dictionary, if necessary. Translate the words into Russian.

Verb	Noun (thing or concept)	Noun (person)	Adjective
autopsy			autopsied
recognize			
	highlight		
establish			
determine			
	examination		
	detection		detective
devise		devisor	
testify		testifier	
charge			

Activity 2. Read the word combinations and translate them into Russian.

To file a charge, on a false charge, charged with the murder of her husband; to be in the highlight, highlighted by the work of Orfila; devised a fingerprint classification scheme, a devisable classification; the first lie detection method; to examine the body, examination of the internal organs from the body; impossible to determine; has already recognized hair, the earliest recognition; to testify upon a trial, from the testifier, testified on the basis of chemical tests.

Activity 3. Choose the correct word from the list to complete each sentence. Translate the sentences into Russian.

lie detector

determining

highlights

recognition

examined

charged

testified

devised

autopsy

detective

established

examination

1. A medical examiner (a coroner) performed an _____ on the murder victim's body.
2. A fingerprint _____ helps to identify the criminal by his/her fingerprints.
3. The genre of the _____ novel was extremely popular in the XXth century.
4. There are some _____ in the history of forensic science.
5. The earliest _____ that fingerprints were unique to individuals was in ancient Babylon.
6. How many people have _____ to the truth of the prisoner's statement?
7. The researcher _____ the body early in the morning.
8. Mr. Simon has already _____ a new technique for examining evidence, a training programs, and taught training workshops.
9. Defendant is a person _____ with committing a crime in a criminal trial.
10. For example, depending on their interests and backgrounds, forensic research scientists might be involved in creating: databases of materials (such as soils, pollens, or animals) for _____ the origin of physical evidence.
11. A polygraph is the other name of _____.
12. Faulds, a Scottish physician, _____ the fact that fingerprints remain unchanged throughout the life of an individual.

⊕ Reading and language study 1

Activity 4. Study the vocabulary and guess what the text is about.

arsenic – мышьяк

body fluid samples – образцы биологической жидкости

advance (v) – продвигаться, развиваться, идти вперед

beneficial – полезный, выгодный, благоприятный

drowning and asphyxiation – утопление и удушение

justice was served – справедливость восторжествовала



Activity 5. Read the text to check your guesses. Give a headline to the text.

(I) Certain aspects of forensic science have been known and used throughout the ages and in many cultures. Perhaps the earliest recognition that fingerprints were unique to individuals was in ancient Babylon, where tablets used to record business transactions were marked with fingerprints. In 250 b.c., a Greek doctor named Erasistratus observed that his patients' hearts beat faster when they were not telling the truth. This doctor used his observations as what is believed to be the first lie detection method. In China, in 1248, a judge, and a forensic medical scientist Song Ci wrote a handbook for coroners. He described methods on post-mortem examinations, various causes of death (i.e. drowning and asphyxiation) and methods of treatments to certain injuries of a wounded person. Not long afterwards, the Bolognese surgeon Bartolomeo da Varignana performed a medical autopsy in a murder case.

(II) Other types of scientific evidence did not start to evolve until the 18th and 19th centuries, a period during which much of our modern-day chemistry knowledge was just starting to be developed. Toxicology, the study of poisons, emerged as one of the new forensic disciplines, and was highlighted by the work of Orfila in 1840 with his investigation into the death of a Frenchman, Monsieur Lafarge. Following examination of the internal organs from the body, Orfila testified on the basis of chemical tests that these contained arsenic. This evidence resulted subsequently in Madame Lafarge being charged with the murder of her husband. She couldn't escape punishment and the justice was served.

(III) During the latter part of the 19th century there was also considerable interest in trying to identify an individual. A successful development in personal identification was to come from fingerprint examinations. Henry Faulds, a Scottish physician established that fingerprints remain unchanged throughout the life of an individual. It was not until 1901, when he devised a fingerprint classification scheme for cataloguing the prints.

(IV) Body fluid samples have also been found to contain information that can help to identify an individual. The progress made in this area and major advances have occurred within the past decade. Up until 1900 it had been impossible to determine if a blood sample or stain was of human or animal origin, or to classify human blood into four main groups: A, B, AB and O. It has only become possible through recent studies of DNA.

(V) Rapid developments in computer technology have also played an important role in the advancement of forensic science. Computers permit the storage of massive amounts of information that can be searched very quickly. With computers has come the establishment of databases for DNA recovered from body fluids and sometimes tissues and hair, fingerprints and footwear marks *etc.* These and other databases can save a tremendous amount of time and effort in a case and are beneficial to both the police in following their enquiries and the forensic scientists in providing evidence and information for the courts [11].

Activity 6. Fill in the table with keywords.

Paragraphs	Keywords
(I)	<i>Forensic science, unique fingerprints,</i>
(II)	
(III)	
(IV)	
(V)	

Activity 7. Put the words into the correct order and answer the questions.

- 1) What / methods / establish / did / the scientists / forensic identification?
- 2) Was / lie detection / the first / method / Madame Lafarge / developed / by?
- 3) How / computers / quickly / allow / do / to find / the certain footprint?

Activity 8. Revise the text and decide if the following statements are true, false or doesn't say.

- 1) History of forensic science is a modern science.
- 2) First lie detection method appeared in Ancient Greece.
- 3) Madame Lafarge played a great role in the development of toxicology.
- 4) Sir Arthur Conan Doyle contributed greatly to the development of this field of study.
- 5) DNA examinations started when the classification of blood was developed.
- 6) The main advantages of using computers in forensic science are controlling instruments and producing analytical data.
- 7) DNA and other databases are beneficial only for the police.

Think about your own 'true, false or doesn't say' statements.

- 8) _____
- 9) _____

Activity 9. Find English equivalents to the following words and word combinations.

- 1) наука о ядах -
- 2) неизменные в течение жизни -
- 3) производить вскрытие -
- 4) экспертиза внутренних органов -
- 5) телесные жидкости -
- 6) распределять кровь по группам -
- 7) банк данных ДНК -

- 8) экономить время и силы -
- 9) избегать наказания -

Activity 10. Read the text again and fill in the gaps. Present your findings in class.

When?	Who?	What?	What`s for?	Where?
250 b.c.		first lie detection method		
				China
1300-1310		a medical autopsy		
	Mathieu Orfila			
				Scotland
	Karl Landsteiner	major human blood types		Austria

Activity 11. Translate the sentences into English

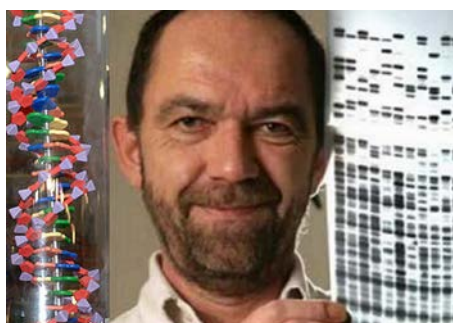
- 1) That morning an old man drank a cup of coffee that contained (мышьяк) and (умер).
- 2) (Результаты дактилоскопической экспертизы) will be announced on Friday.
- 3) This medicine (имеет очень благоприятное воздействие) on immune system.
- 4) His assistants can check in (базе данных) if (обвиняли ли ее) in (убийстве).
- 5) Italian physician and pioneer in forensic pathology Bartolomeo da Varignana (провел вскрытие трупа).
- 6) In Russia medical (освидетельствования, экспертизы) were conducted from time to time in the XVI-XVII centuries.
- 7) Chinese scientist Song Ci distinguished (разница между утоплением и удушением).
- 8) (Банк данных ДНК) of the most serious criminals is being made in Russia.
- 9) Consequently, a detective can be certain that a criminal's (отпечатки пальцев останутся неизменными) until death.
- 10) The tsar Peter the Great (отметит, признал) the value of (судебно-медицинская экспертиза вскрытия трупа) in case of violent death.

⊕ Reading and language study 2



Activity 12. Read the text below and divide it into logical parts.

Explain the key idea of each paragraph.



Alec Jeffreys, a British geneticist, who developed techniques for DNA fingerprinting and DNA profiling was born in 1950. Jeffreys's achievements are used worldwide in

forensic science to assist police work and to resolve paternity and immigration disputes. His technique of DNA fingerprinting is used for unique identification of humans, animals and other organisms from their DNA material. Jeffreys was educated at Oxford, where he completed his PhD in 1975. After spending two years at the University of Amsterdam as a research fellow he joined the genetics department of the University of Leicester. He was appointed professor of genetics in 1987 and knighted in 1994 for his research in genetics. DNA fingerprinting has become important for forensic science investigations, paternity issues, and detection of hereditary disease. On the 10th of September 1984, Jeffreys and his team got their first DNA fingerprint purely by chance and he could spot the family group present in that blot and distinguish all three members by what appeared to be a simple pattern of inheritance "We suddenly realized that we'd stumbled upon a DNA-based method for biological identification. My life completely changed at that point," he says. After the discovery of the first DNA fingerprint his life changed. In 1986, as Jeffreys and his small laboratory handled all the DNA test requests for issues regarding immigration, paternity, and the like, Jeffreys faced challenges for making DNA fingerprinting appropriate for use in forensics. In 1986, Jeffreys was contacted by local police regarding a murder case where two schoolgirls had been raped and murdered 3 years apart in an apparent copycat crime. The police had a suspect in custody, but although he confessed to the second murder, he denied the first. Jeffreys was asked to use DNA profiling to tie the suspect to both cases. The results were completely unexpected: both samples belonged to the same man but were not from the suspect. Then the police totally believed DNA and launched what proved to be the world's first DNA-based manhunt, asking for blood samples from men from the entire local community. Perpetrator was found so that was the birth of forensic DNA in real casework. Since that time DNA has potentially saved the life of many victims [8].

Activity 13. Find English equivalents to the following word combinations.

- 1) составление ДНК-профиля человека -
- 2) генетическая дактилоскопия
(определение ДНК по отпечаткам пальцев) -
- 3) решать вопросы об установлении отцовства -
- 4) научный сотрудник -
- 5) произведен в рыцари -
- 6) наследственные болезни -
- 7) преступление, совершенное преступником-подражателем -
- 8) признаться в совершении убийства -
- 9) найти связь между двумя преступлениями -
- 10) генетически ориентированное преследование -

Activity 14. Find Russian equivalents to the following words and word combinations.

- 1) unique identification of humans -
- 2) detection of hereditary disease -
- 3) forensic science investigations -
- 4) spot the family group in a blot-
- 5) a simple pattern of inheritance -
- 6) to stumble on -
- 7) appropriate for use in forensics -
- 8) apparent -
- 9) to face challenges -

Activity 15. Translate the questions into English and answer them. What question is odd here. Can you answer it anyway?

1. Чем известен Сэр Алек Джефрис?
2. Как генетическая экспертиза борется с подложным отцовством (paternity fraud)?
3. Как генетическая дактилоскопия помогает найти преступника?
4. Составление ДНК-профиля человека используется в вопросах установления отцовства, иммиграционных делах, установлении личности преступника, не так ли?
5. Используется ли метод ДНК-профилирования только в судебной экспертизе?

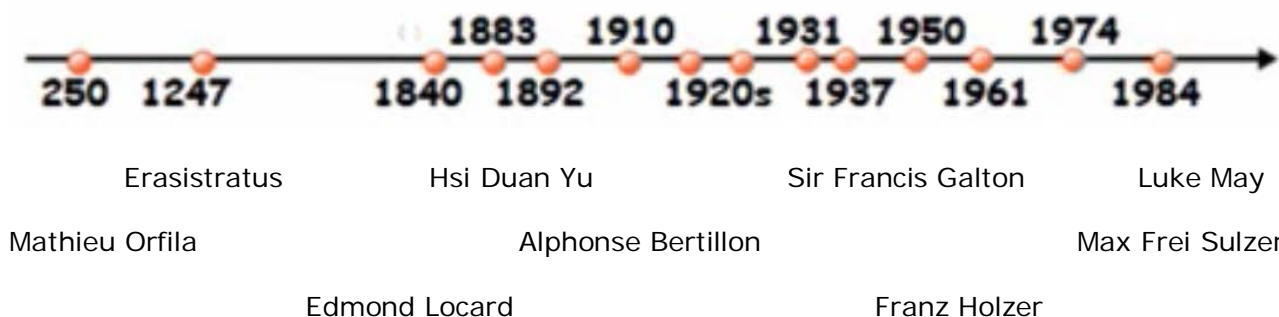
Activity 16. Skim the text and do a mind map to the text.

⊕ Youtube corner



<https://www.youtube.com/watch?v=TbuTirBdZjQ>

Activity 17. Watch a video "Forensic Science Timeline" and match the date and the scientist



Activity 18. Watch again and tick a true answer.

- 1) In 250 b.c., a Greek doctor named Erasistratus _____ .
- A. invented lie detection method.
 - B. performed a medical autopsy in a murder case.
 - C. made a bullet comparison to solve a murder.
 - D. developed a fingerprint classification system.
- 2) Alphonse Bertillon applied _____.
- A. anthropometry to law enforcement
 - B. identification system of blood types
 - C. the establishment of databases for DNA
 - D. the comparative microscope
- 3) The first police crime lab was established in France by _____.
- A. Mathieu Orfila
 - B. Sir Alec Jeffreys
 - C. Edmond Locard
 - D. Alphonse Bertillon
- 4) The first blood testing was used ____
- A. After DNA analysis
 - B. Before DNA analysis
- 5) In the 19th century forensic science saw real progress.
- Choose all that you that did NOT apply:
- A. fingerprints classification.
 - B. the Marsh test application.
 - C. the tape lift method.
 - D. the anthropometry.
- 5) Almost every year in the 1900s an advance was recorded in the field(s) of...
- Choose ALL that you saw:
- A. Study of voiceprint identification.
 - B. Identification of knives, tools and instruments.
 - C. Crime lab establishment.
 - D. Evaluation of the gas chromatograph for forensic purposes.
 - E. Development of blood type technique.
 - F. Invention of the comparison microscope.
- 7) Luminol is a chemical that gives a ____ glow when it mixes with blood.
- A. green
 - B. blue
 - C. orange
 - D. balck
- 8) In 1984 Sir Alec Jeffreys discovered _____ the most important forensic science discovery up to date in England.
- A. DNA profiling tests
 - B. the comparison microscope
 - C. lip prints identification
 - D. blood type technique
 - E. "trace evidence" term
 - F. luminal

Activity 19. Watch the video again and fill in the gaps. Present your findings in class.

1.	first lie detection method
2.Mathieu Orfila	
3.Alphonse Bertillon	
4.Sir Francis Galton	fingerprints classification
5.Edmond Locard	
6.Luke May	striation analysis
7.Franz Holzer	blood type technique
8.Maz Frei Sulzer	tape lift method of collecting trace evidence
9.Scientists at Aerospace Corporation	the detection of gunshot residue (GSR)
10.Sir Alec Jeffreys	

⊕ Compare & contrast

Activity 20. Read the article "Forensic Science History"

https://www.troopers.ny.gov/Crime_Laboratory_System/History/Forensic_Science_History/

Use comparing linking expressions as "like", "both", "unlike", "describes/shows", "be focused on" to answer the questions:

What achievements were reached in those centuries?

Were there any similarities and differences?

How did scientists identify the suspects / criminals / victims?

⊕ Speaking

Activity 21. Role play.

Case: a person was found dead in the library.

Instruction: The group is divided into two parts. Two or three students are forensic reporters. The others are famous scientists as Erasistratus, Mathieu Orfila, Alphonse Bertillon, Sir Francis Galton, Franz Holzer, Max Frei Sulzer, Edmond Locard Sir Alec Jeffreys, Franz Holzer and etc.

Reporters` task: to interview the scientists how they will solve the crime.

Scientists` task: to inform about your method and the previous ones.

⊕ Develop your skills

Activity 22. Study the section "Annotation" (Лапкина Ю.Ю. Speed reading: forensic science on the BBC news? pp.11-12) and write down an annotation to the text (Activity 20).

⊕ Glossary

Historical background of forensic science

Verbs and word combinations

- 1) to advance
- 2) to autopsy
- 3) to belong to
- 4) to confess; confession
- 5) to deny
- 6) to devise
- 7) to detect; to ~ a hereditary disease
- 8) to determine
- 9) to distinguish
- 10) to face challenges
- 11) to establish
- 12) to highlight
- 13) to knight; a knight; to be knighted
- 14) to observe
- 15) to murder; a murder
- 16) to rape; a rape
- 17) to recognize
- 18) to spot the family group in a blot
- 19) to stumble on
- 20) to testify
- 21) to tie; ~ the suspect to both cases

Achievements, discoveries and inventions

- 22) anthropometry
- 23) comparison microscope
- 24) blood type technique
- 25) bullet comparison
- 26) DNA profiling tests
- 27) fingerprint classification system
- 28) gas chromatograph for forensic purposes
- 29) lie detection method
- 30) lip prints identification
- 31) luminal
- 32) the Marsh test application
- 33) medical autopsy in a murder case

- 34) tape lift method
- 35) voiceprint identification

Nouns and word combinations

- 36) arsenic
- 37) a body fluid sample
- 38) a casework
- 39) a copycat; a ~ crime
- 40) DNA profiling (DNA testing, DNA typing, or genetic fingerprinting)
- 41) a database
- 42) an identification of humans
- 43) a manhunt; DNA-based ~
- 44) paternity; ~ issues; ~ fraud
- 45) a pattern of inheritance
- 46) a research fellow; a ~ in genetics
- 47) team; a CSI ~
- 48) a tissue; a bone ~

Causes of death through autopsies

- 49) asphyxiation
- 50) drowning

Adjectives and adverbs

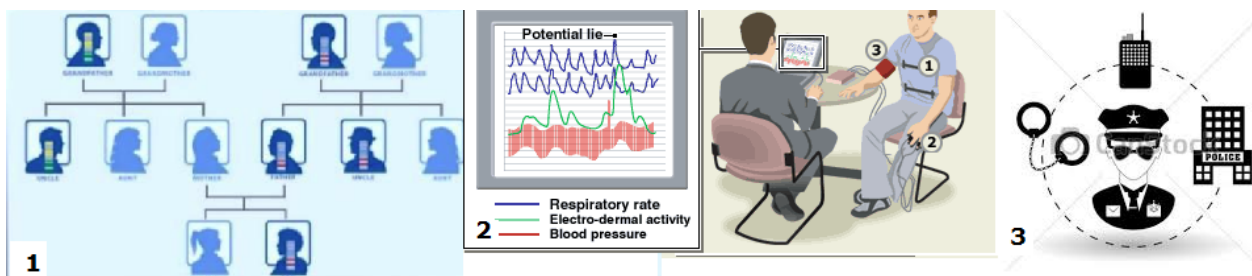
- 51) apparent
- 52) appropriate; ~ for use in forensics
- 53) beneficial
- 54) (un)expectable
- 55) pure; purely by chance



Check yourself

Activity 23. Translate the following words and word combinations. Which of them will help you to describe the pictures.

- | | |
|-------------------------------------------|---------------------------------------------------------------------------------------|
| 1) детектор лжи | 1) toxicology and fingerprint examination |
| 2) генетическая дактилоскопия | 2) to handle/ perform / conduct DNA tests for issues regarding immigration, paternity |
| 3) установления отцовства | 3) lip prints identification |
| 4) найти связь между двумя преступлениями | 4) appropriate for use in forensics |
| 5) составление ДНК-профиля человека | 5) the world's first DNA-based manhunt |



Activity 24. Study the list of questions. How many can you answer?

- 1) How can forensic science help people?
- 2) What Russian (foreign) famous forensic scientists and researchers do you know?
- 3) What methods of forensic identification did the scientists establish?
- 4) When was the first lie detection method?
- 5) How quickly do computers find the certain footmark?
- 6) What made Sir Alec Jeffreys famous?
- 7) How does DNA help to find the criminal?
- 8) How did the discovery of the first DNA fingerprint change the criminal justice?
- 9) Are DNA profiling and fingerprinting used in forensic science investigations or in detection of hereditary disease?
- 10) Did DNA examinations start when the classification of blood was developed?

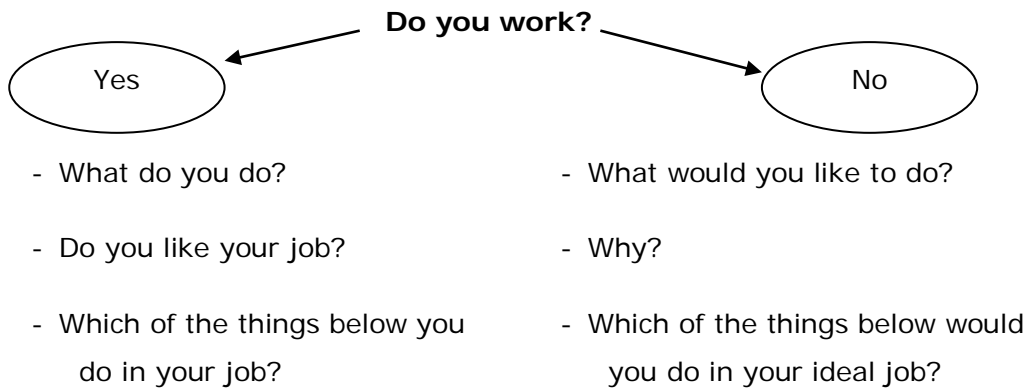
Activity 25. Translate the following sentences.

- 1) (Банк данных ДНК) of the most serious criminals is being made in Russia.
- 2) Jeffreys was asked to use DNA profiling (чтобы найти связь между убийствами).
- 3) (Результаты генетической и дактилоскопической экспертиз) were announced in the evening.
- 4) (Подложное отцовство) is one of the major problems in family courts in the USA.
- 5) All bodies were (подвергнуты патологоанатомическому исследованию), а (образцы) of (костной ткани) отправлены на (ДНК-экспертизу).

UNIT III. FORENSIC SCIENCE CAREERS

⊕ Warm-up

1. Discuss the following questions.



2. A crime scene investigator and a forensic scientist do two very different jobs. Which of the things below they don't do?

- | | | |
|----------------------------------|---------------------|-------------------------------|
| wear a uniform | work at night | use your hands |
| give orders | drive a car | work in an office/lab |
| travel | work with money | use a computer |
| work outside | sell food/clothes | speak on the telephone |
| advertise and promote activities | protect/help people | identify items and make notes |



Crime scene investigator	Lab officer

⊕ Vocabulary

Activity 1. Fill in the table. Not all forms will be used for each word. Use dictionary, if necessary. Translate the words into Russian.

Verb	Noun (thing or concept)	Noun(person)	Adjective
to analyze			
			safe
			responsible
	crime		
	cause		
	search		
to compare			

Activity 2. Read the word combinations and translate them into Russian.

Comfortable and safe forensic labs, a significant portion of the workday, to analyze an accident, in search of clues, to search for evidence, a cause of death, solving crimes, to compare DNA found at the scene to the suspect`s, a working environment, potentially dangerous substances, conduct scientific experiments, to test the collected evidence, to put in protective containers.

Activity 3. Choose the correct word from the list to complete each sentence. One word is odd. Translate the sentences into Russian.

tests	responsible	compare	safely
analyzing	searches	caused	analyst
collected	criminal	dangerous	responsibility

- 1)Expert is the synonym of scientist or _____.
- 2)Experts are trying to find out what _____ the death of the victim.
- 3)A forensic scientist will need to carry out some _____.
- 4)The age of criminal _____ in England and Wales is 10 years old.
- 5)Many substances are analyzed by forensic scientists at the crime lab to determine _____ the presence of controlled substances in plant materials, powders, liquids, capsules, and tablets.
- 6)Experts are still _____ the DNA evidence in the case.

- 7)The data is _____and then analyzed on computer.
- 8)_____records are private and protected info under various privacy regulations so I doubt you will find them just available for free.
- 9)Even the most dangerous chemicals can be used _____in the forensic laboratory if people recognize the risks to which they may be exposed.
- 10)Forensic scientists are _____for presenting impartial scientific evidence in courts.
- 11)In the crime lab, forensic scientists _____samples of evidence from the crime scene to known samples.
- 12)Crime scene _____ and evidence collection are the backbone of criminal investigation.

⊕ Reading and language study 1

Activity 4. Study the vocabulary and guess what the text is about.



encounter poison ivy to potholes - натолкнуться на ядовитый плющ или выбоину

bodily fluids or chemicals - телесные жидкости или химикаты

placed on sterile slides - размещаться на стерильных слайдах

shed light on - пролить свет

a law enforcement official – сотрудник правоохранительных органов

Activity 5. Read the text to check your guesses and subtitle each paragraph.

(I) Forensic scientists as crime scene investigators* (CSIs) and lab officers play a crucial role in investigating and solving crimes. Crime scene investigators primarily analyze the scene of a crime or accident and collect evidence. Lab officers analyze that evidence in search of clues pointing to a possible suspect, cause of death or other key information.

(II) Lab officers must always have a bachelor of science. The experts often need only a science degree because they don't investigate crimes directly. Instead, they conduct scientific experiments and analysis. Some, however, supplement their science training with master degree in forensic investigation. Crime scene technicians may have only an associate degree (completion of a study course usually lasting two years) and police academy training.

(III) CSIs are often the first law enforcement officials to identify key pieces of evidence. They tour the entire scene, search for anything that might shed light on what happened, how it happened, and who is responsible. After identifying potential evidence, they collect it. They also document everything they collect and put it in protective containers. Lab officers test the collected evidence and can tell investigators about the crime. For example, they can compare DNA found at the scene to the suspect`s.

(IV) CSIs often work outdoors and in extreme conditions such as heat, cold, rain or snow. They visit remote or unsafe, or unsanitary areas where they could encounter anything from poison ivy to potholes. Lab officers often handle potentially dangerous substances such as bodily fluids or chemicals, but face less risk because the materials have already been placed on sterile slides or otherwise been rendered safe.

(V) CSIs visit crime scenes to collect evidence, and spend a significant portion of the workday on their feet. They never know until they arrive at the scene what conditions they'll be working in or how long it will take. Forensic scientists usually work in forensic labs, which are kept comfortable and safe. They know exactly what kind of environment they'll be working in every day and typically work a traditional 40-hour work week [25].

* Crime scene investigator (CSI) goes by many names, including evidence technician, crime scene technician, forensic investigator, crime scene analyst, criminalist officer and more.

Activity 6. Put the words into the correct order and answer the questions.

- 1) what/ should/ forensic/ their/ duties/ degree / have/ to/ scientists/ perform?
- 2) do / / do/ what?
- 3) where / lab/ do/ officers / work?
- 4) where / crime scene investigators/ do/ work?
- 5) who/ irregular/ work/ hours?
- 6) crime scene investigators/ the/ between/ difference/ officers / what/ key/ lab/ is/ and?

Activity 7. Revise the text and find out whether the following statements are true, false or doesn't say.

- 1) There are usually 5 crime scene investigators working at the crime scene.
- 2) Crime scene investigators seldom work a 40-hour work week.
- 3) The job of forensic scientists is less risky than crime scene investigators'.
- 4) Lab officers usually work in comfortable and safe forensic labs.
- 5) After collecting evidence, crime scene investigators identify it.
- 6) Crime scene investigators sometimes work in unsanitary areas.

Think about your own 'true, false or doesn't say' statements.

- 7) _____
- 8) _____
- 9) _____

Activity 8. Find English equivalents to the following words and word combinations.

- 1) эксперт-криминалист
- 2) играть решающую роль -
- 3) анализировать место преступления -
- 4) несчастный случай -
- 5) собирать улики -
- 6) возможный подозреваемый -
- 7) ключевая информация -
- 8) тепло и холод -
- 9) проводить научный эксперимент -
- 10) работать в экстремальных условиях -
- 11) сталкиваться с меньшим уровнем риска -
- 12) размещаться на стерильных слайдах -

Activity 9. Make up as many sentences as possible using the table below.

S	V	O	P	details
Forensic scientists	identify	- on what happened	-in investigating	as heat, cold,
A crime investigator	compare	-the scene	-at the scene	rain or snow
A lab officers	work	- a possible suspect	outdoors/	as bodily
Crime scene technicians	collect	-potential evidence	-in extreme	fluids or
A forensic scientist	encounter	-a crucial role - evidence	conditions/	chemicals
	handle	-poison ivy to	-remote /unsafe/	
	put	potholes	unsanitary areas	
	document	-DNA	-on sterile slides	
	arrive	-environment	-in forensic labs	
	analyze	-potentially	-in protective	
	know	dangerous	containers	
	play	substances		
	shed light	-materials		
	can point to	-cause of death		

Activity 10. Translate the dialogue into English.

Анна: Джон, как давно ты занимаешься судебной экспертизой?

Джон: Three years.

Анна: А чем в целом занимается судебный эксперт?

Джон: Forensic scientists play an important role in a court proceeding. Они изучают собранный материал и предоставляют следователю различные доказательства: от ранее известных до совершенно новых.

Анна: Я так понимаю, что работа судебного эксперта позволяет выявлять подозреваемых, подтверждать или опровергать другие доказательства, на основе собранных улик.

Джон: Да. Мы помогаем полиции и правоохранительным органам и облегчаем работу следователей.

Анна: Правда, что судебный эксперт может выступать свидетелем в суде?

Джон: Обычно да, но не всегда. Судебный эксперт обычно представляет те улики, которые были найдены им самим.

Анна: Т.е. судебный эксперт полностью несет ответственность только за свои экспериментальные результаты?

Джон: Да. Но также он может быть ответственным за те исследования, которые были сделаны под его чутким руководством.

Анна: Всё это требует очень хорошей профессиональной подготовки и большой практики.

Джон: Конечно. Наши эксперты получают надлежащую подготовку, используют как традиционные стандартизированные методы, так и современные.

Анна: Спасибо, Джон, за представленную информацию.

⊕ Reading and language study 2

Activity 11. Read the text below and divide it into logical parts.

Explain the key idea of each paragraph.



Economists are social scientists who study commercial activity including the manufacturing, allocation, and utilization of goods and services. When difficult economic factors lead to legal issues, specialists called forensic economists contribute to their resolution. These experts are consultants who provide various forensic economic services to attorneys, businesses, government agencies, non-profit organizations, and others. They assist on litigious cases that involve either individuals or organizations across the spectrum of economic power. They analyze the financial impact suffered by organizations in litigious circumstances arising from the wrongful death or injury of an employee. They assess damages and losses that organizations incur in intellectual property cases such as copyright, trade secret, and patent violations. Many forensic economists offer litigation support services to attorneys, who may work for either the defense or the plaintiff. They may be involved in criminal cases, civil litigation, or regulatory matters. They perform such general tasks as: collecting evidence, interviewing witnesses, formulating lists of questions that lawyers may ask to cross-examine witnesses, helping lawyers determine the facts and issues of a case, educating attorneys about the various economic topics involved in a case. They also analyze and evaluate cases to help

lawyers determine whether they should be brought to trial and prepare detailed reports, including references, information sources, spreadsheets, and other documentation for lawyers to use in negotiation of settlements as well as court proceedings. Typically, economists complete many years of work experience before becoming forensic consultants. To be effective consultants, forensic economists need excellent communication and interpersonal skills, as they must be able to work well with attorneys and other people. In addition, they must have strong self-management, analytical, organizational, report-writing, and presentation skills. Some personality traits that successful forensic economists share include being fair, honest, trustworthy, objective, diligent, curious, and personable [11].

Activity 12. Find Russian equivalents to the following words and word combinations.

- 1) to provide economic services to attorneys –
- 2) to manufacture, allocate and utilize goods and services –
- 3) trustworthy and diligent –
- 4) trade secret and patent violations –
- 5) to assess damages and losses –
- 6) to be brought to trial –
- 7) to be involved in criminal cases –
- 8) economic factors -
- 9) to assist on litigious cases –

Activity 13. Find English equivalents to the following words and word combinations.

- 1) нарушения авторского права –
- 2) оценивать убытки –
- 3) честный и справедливый –
- 4) отличные коммуникативные навыки –
- 5) предлагать услуги поддержки (по сопровождению) при судебном разбирательстве –
- 6) переговоры –
- 7) интеллектуальная собственность –
- 8) подготовить детальный отчет -

Activity 14. Translate the questions into English and answer them.

- 1) Кто способствует разрешению юридических проблем, которые вызваны экономическими факторами?
- 2) Какие основные обязанности у судебного эксперта в области экономики?
- 3) Кого обслуживают данные эксперты?
- 4) В каких случаях к работе привлекаются судебные эксперты в области экономики?
- 5) Как они помогают юристам?

Activity 15. Skim the text and do a mind map to the text.



📌 Video Corner

Activity 16. Look through the vocabulary and make predictions what the episode will be about.

CSI – crime scene investigation – расследование места преступления

John and his crew – Джон и его бригада

to smudge – пачкать; to walk free – выйти на свободу

to contaminate the scene – оставлять следы на месте преступления, загрязнять место преступления

to be thrown out of court – не дойдет до судебного разбирательства

Activity 17. Read the passage and discuss the questions.

The CSI effect is one way in which the exaggerated portrayal of forensic science on crime television shows such as CSI: Crime Scene Investigation. The term most often refers to the belief that jurors demand more forensic evidence in criminal trials, thereby raising the effective standard of proof for prosecutors.

Activity 18. Watch the video <https://www.youtube.com/watch?v=EQUE8leVmpA> and answer the questions.

- 1) What do people think the crime scene investigators should do?
- 2) What do they really do? (2 functions)

Activity 19. Watch the video again and fill the gaps.

On certain TV shows crime scene investigators seem to do it all the _____ and _____ but that's not what real CSIs do. Senior investigator John Carey and his _____ do one thing and one thing only. "We are very specialized. Our job is specifically dealing with the evidence going into the scene _____". The work John and his crew perform, creates the basis of the entire _____.



If they smudge _____ or don't perfectly fulfill _____, they would contaminate the scene. And the whole investigation would be thrown out of court, and _____ could walk free. Thanks to TV, crime scene investigators have _____ what they call the CSI effect when they _____ in front of jurors.

Activity 20. Discuss the questions in pairs.

- 1) Is it a position of a forensic scientist or a criminalist John Carey is talking about?
- 2) Why is it very important to do the job accurately?

3) What is John Carey speaking about exactly?

⊕ Compare & contrast

Activity 21. Study the article of Elena A. Frolycheva "Forensic expertise. Different approaches to the education of experts in Russia and foreign countries" presented and decide if the statements are true or false. <http://ov.conf.udsu.ru/econ-law/article/view/1068/1056> .

- 1) Professional education for forensic specialists in Scandinavian countries and Russia has much in common.
- 2) Scandinavian educational approach is more theoretical.
- 3) Scandinavian forensic experts are trained in forensic labs or law enforcement agencies and afterwards they obtain MS degree.
- 4) Forensic science students in both countries tend to study three majors.
- 5) The author describes the concept of "adaptive graduate" that meets requirements of professional activity.
- 6) Applicants who are positively selected get a two year internship in a forensic lab.
- 7) Bachelors of Science are more welcome.
- 8) Forensic scientists are highly-demanded in Finland.
- 9) Higher education courses are not offered by forensic labs in Russia.
- 10) There is a part-time course of Master of Forensic science in Udmurt State University.

Activity 22. Read the article again and define how the Russian system is compared with the education of experts in the Nordic countries.

Activity 23. Study the article and compare the duties of forensic experts in Russia to those who work in the UK. What similarities and differences can you find? Present your findings in class. <http://base.garant.ru/12123142/7a58987b486424ad79b62aa427dab1df/>

⊕ Speaking

Activity 24. Choose one of the jobs mentioned in the unit 'Forensic science careers' and fill in the chart for that job. Tell your partner about your choice.

Job	Hours (long? Irregular?)	Education	Place of work
Goal	Uniform	Risk	Pay (good?)

Activity 25. Choose a role card and take part in a discussion according to your role.

<p>Role 1. Personnel officer in the recruitment agency. A crime lab requires one more forensic scientist. Interview the applicants and report about your choice to the manager. <u>Task</u>: to find the employee. <u>Education requirement</u>: BS in Chemistry/ Biology, courses (degree) in Forensic science. <u>Experience</u>: a year in a crime lab.</p>
<p>Role 2. 40-year-old law enforcement officer, fired not long ago (staff reduction). <u>Education</u>: master`s degree in Education and Chemistry, degree in Law Enforcement. <u>Experience</u>: two years as a police officer, a year as a private detective, three years as a teacher of chemistry.</p>
<p>Role 3. 28, moved to other town, have dreamt about it since your childhood. <u>Education</u>: master`s degree in Biology. <u>Experience</u>: two years in different biological labs as technician.</p>
<p>Role 4. 30-year-old criminal investigator from Russia, married, two children. Skills: foreign languages (English, read, translate). <u>Education</u>: specialist degree in forensic science and master`s degree in crime investigation. <u>Experience</u>: ten years in a private crime investigation agency. <u>Extra</u>: a residence permit to live in the USA.</p>
<p>Role 5. young, physically fit, a healthy life style, a desire to work <u>Education</u>: bachelor degree in fire investigation. <u>Experience</u>: -</p>
<p>Role 6. You are a manager of a crime agency. A personnel officer has interviewed several applicants on a forensic scientist job position. Listen to his / her report attentively, ask questions and make a final choice.</p>

⊕ Develop your skills

Activity 26. Study the article and the report sample. Write down a crime report on a case 2.

The Elements of Reporting

In writing a crime report, police officers must include the following:

- 1) The "Elements of the Crime" (evidence).

It must be evident that something against the law has been done.

Example: Something has been taken from a person against his will. Johnny Jones' bike was taken from his front yard without his permission.

- 2) A Description of the Crime Scene The place in which a crime took place must be described.

Example: The crime took place in a residential neighborhood of single family homes. (Include address, cross streets, etc.)

- 3) Statements by Witnesses Exactly what has been said by people who saw what happened and their descriptions of the people involved must be written.

Example: Witnesses say a boy of about 14 with shaggy, brown hair was seen taking the bicycle.

- 4) A Summary of the Crime The summary must tell a story of what happened. It must be in chronological order—that is, the order in which it happened.

Example: Johnny left his bike on the lawn while he went inside the house. A neighbor saw another boy ride off on the bike. When Johnny came out of the house, he saw his bike was gone. He called the police.

- 5) The Purpose of the Report—To Tell Who, What, When, Where, Why, and How a Crime Happened.

A crime report does not entertain and is written with mostly nouns and verbs. It is short and to the point. A crime report is factual and does not speculate.

Using these facts gathered at the scene of a crime by a police officer, write a summary of the crime. First, make sure the elements of a crime are present:

- Was a crime committed, such as stealing?
- Next tell exactly what happened.

Describe where the crime happened. What does it look like? What did witnesses say? Tell what happened in the correct order in which it happened. Write only the facts [27].

Case 1: A bike was stolen from a front yard in a neighborhood of small, clean homes with green trees and lawns.

Witness #1 said this has been happening a lot lately. He doesn't know what's gotten into these kids lately. They're sure doing a lot of bad things.

Witness #2 said Lion Kerk shouldn't have left his bike out on the lawn; he was just asking for trouble. This is what the witness saw happen. He was cooking his dinner and looked out the window. A boy about 14 years old was walking by, saw the bike, jumped on it, and rode off. The boy was about average height and had scraggly, brown hair. The witness couldn't see his eyes.

A boy called the police station to report his bike missing. He left it in the front yard while he went in the house to get some cookies. When he came back out, the bike was gone. He doesn't know anyone who would steal his bike. He's really upset. He bought that bike two weeks ago. He earned the money raking leaves and mowing lawns. He doesn't think it's fair. His name is Lion Kerk, and he lives at 321 Brave Alley. He was born November 27, 1988.

Example: The victim reported his bike stolen after he left it on the lawn for a few minutes. Neighbors across the street saw another boy approximately 14 years old walking by the house. This boy jumped on the bike and rode away. The neighborhood is a clean street with small, well-kept houses and lawns. Another neighbor said there have been a lot of bikes stolen lately.

Case 2: Someone has been riding a bicycle onto the front lawn of the college. There has been a lot of rain the past several weeks, so the lawn is very wet and very soft. The bicycle tires make big gouges in the lawn and will cost 300 dollars to repair. A neighbor across the street saw two boys doing wheelies on the lawn with their bikes. The principal got to college early this morning and saw John Lewis riding his bike away from the school. The tires of the bike were covered with mud. He detained John Lewis and called the police. John's mother says she knows that her son couldn't do something as bad as ruin the lawn because he's always good, and everybody knows he's always good. The neighbor says John isn't always good and that he was one of the boys doing wheelies [27].

Verbs and word combinations

- 1) to analyze
- 2) to assess damages and losses
- 3) to be brought to trial
- 4) to cause
- 5) to compare
- 6) to contaminate the scene
- 7) to cross-examine witnesses
- 8) to determine the facts and issues of a case
- 9) to encounter poison ivy to potholes
- 10) to exaggerate
- 11) to follow certain protocols and standards
- 12) to formulate lists of questions
- 13) to gain; ~ basic knowledge; ~ experience
- 14) to incur
- 15) to interview witnesses
- 16) to prepare detailed reports
- 17) to provide various forensic economic services to attorneys
- 18) to pursue a career
- 19) to respond
- 20) to save
- 21) to search; a search
- 22) to smudge
- 23) to suffer
- 24) to testify in court as expert witnesses
- 25) to tie; ~ the suspect to both cases
- 26) to be thrown out of court

Nouns and word combinations

- 27) advancement and employment prospects
- 28) an applicant
- 29) bodily fluids
- 30) a crew (a team)
- 31) CSI effect
- 32) the defense / the prosecution
- 33) a full-time or part-time job

- 34) a government agency
- 35) an impact
- 36) a key piece of evidence
- 37) a litigation support service
- 38) manufacturing, allocation, and utilization of goods and services
- 39) negotiation of settlements
- 40) a non-profit organization
- 41) an opportunity
- 42) a salary
- 43) a sterile slide
- 44) a supplement
- 45) work experience

Crime scene and criminal investigation personnel

- 46) Crime Scene Investigator (CSI)
- 47) Patrol Officer
- 48) Fire Investigator
- 49) Polygraph Examiner
- 50) Fingerprint Technician

Crime lab personnel

- 51) Criminalist
- 52) Crime Lab Technician
- 53) Crime Lab Supervisor
- 54) Crime Lab Director

Forensic scientists

- 55) Bloodstain Pattern Analyst 46
- 56) DNA Analyst
- 57) Firearms Examiner
- 58) Forensic Biologist
- 59) Forensic Chemist
- 60) Forensic Drug Chemist
- 61) Forensic Serologist
- 62) Latent Print Examiner
- 63) Trace Evidence Examiner

Medicolegal death investigation personnel

- 64) Medical Examiner (Coroner)
- 65) Forensic Pathologist
- 66) Forensic Toxicologist
- 67) Forensic Pathology Technician

Forensic Experts in Art and Multimedia

- 68) Forensic Photographer
- 69) Forensic Video Analyst
- 70) Forensic Audio Examiner
- 71) Forensic Artist

Forensic experts in other sciences

- 72) Forensic Engineer
- 73) Accident Reconstruction Specialist
- 74) Forensic Architect
- 75) Forensic Accountant
- 76) Forensic Economist
- 77) Fraud Examiner
- 78) Forensic Linguist
- 79) Computer Forensics Specialist
- 80) Crime Reporter

Skills and personality traits

- 81) interpersonal skills
- 82) strong self-management
- 83) analytical and organizational skills
- 84) report-writing and presentation skills
- 85) honest
- 86) trustworthy
- 87) objective
- 88) diligent
- 89) curious
- 90) personable

Cases forensic economists involved into:

- 91) criminal cases
- 92) civil litigation
- 93) regulatory matters

Types of reports of forensic economists

- 94) references
- 95) information sources
- 96) spreadsheet

Intellectual property cases

- 97) copyright
- 98) trade secret
- 99) patent violations

⊕ Check yourself

Activity 27. Translate the following words and word combinations.

- | | |
|-----------------------------------------------------|----------------------------------------------------------------------|
| 1) work for either the defense or the plaintiff | 6) несет ответственность только за свои экспериментальные результаты |
| 2) civil litigation, or regulatory matters | 7) получают надлежащую подготовку |
| 3) ask to cross-examine witnesses | 8) установить личность подозреваемого |
| 4) excellent communication and interpersonal skills | 9) специалист криминалистической лаборатории |
| 5) trustworthy | 10) опровергать другие доказательства |

Activity 28. Study the list of questions. How many can you answer?

- 1) What is the difference in functions of lab officers and CSIs?
- 2) Is there anything similar in job positions of a lab officer and a CSI?
- 3) What is a CSI effect? What do people think the crime scene investigators do?
- 4) Lab officers test the collected evidence and can tell investigators about the crime, don't they?
- 5) What professions of forensic scientists do you know? What is the difference between an economist and a forensic economist?
- 6) What skills and personality traits should a forensic economist have?
- 7) What does a forensic economist do?
- 8) Are Scandinavian forensic experts trained in forensic labs or law enforcement agencies?
- 9) Are forensic scientists highly-demanded in Finland or in Russia?
- 10) You can easily complete CSI online courses and work as a forensic scientist in Russia, don't you?

Activity 29. Complete the sentences with suitable words.

- 1) Having searched the crime scene, (криминалист) found some (улик) and (поместил их в защитные контейнеры).
- 2) (Эксперты криминалистической лаборатории) often handle potentially dangerous substances such as (телесные жидкости или химикаты).
- 3) A forensic scientists can (выступить свидетелем в суде)
- 4) Functions of a lab officer can (позволяет выявлять подозреваемых), prove or (опровергать другие доказательства), based on collected evidence.
- 5) This demands a very good (профессиональной подготовки и большой практики).

UNIT IV. CRIME SCENE INVESTIGATION



⊕ Warm-up

1. Discuss the following questions.

- 1) Why is crime scene investigation important?
- 2) What professionals examine the scene?

2. Look through the words in the table. Match them with numbers at the picture.

Some words are odd.

police line tape

body

evidence

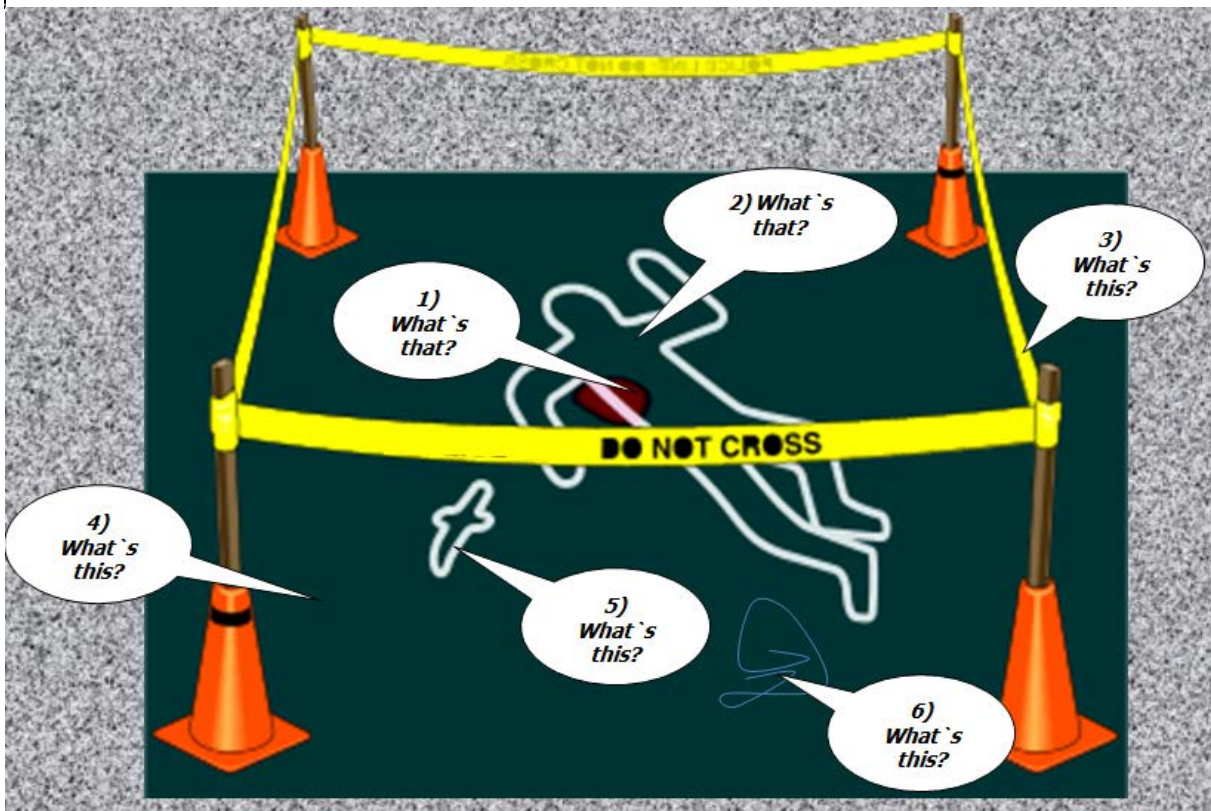
crime instrument

criminal

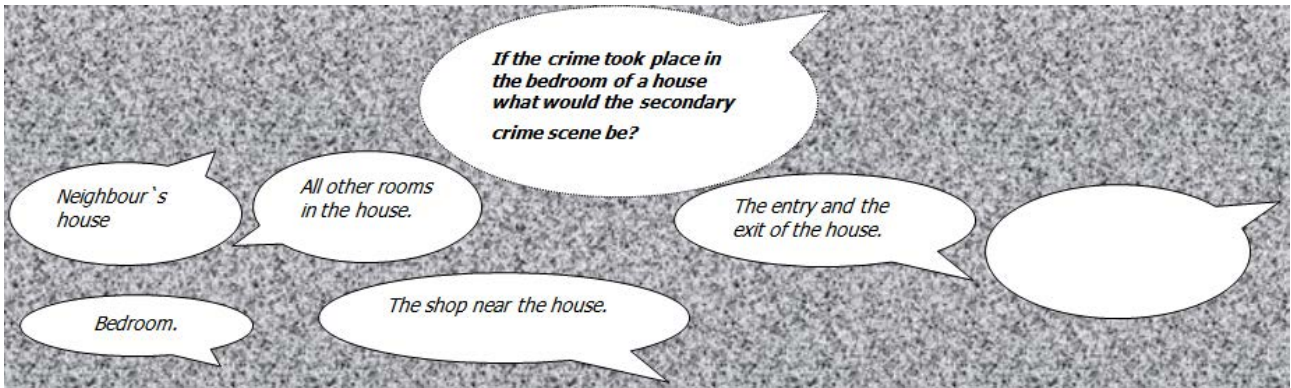
primary crime scene

suspect

blood



3. Choose the appropriate answers to the question below. Add more if possible.



Activity 1. Fill in the table. Not all forms will be used for each word. Use dictionary, if necessary. Translate the words into Russian.

Verb	Noun (thing or concept)	Noun(person)	Adjective
	collection	collector	
to document			
to furnish			
	involvement		
to issue	issue	issuer	issued
	occurrence		
		recorder	
to exchange			
to secure			

Activity 2. Read the word combinations and translate them into Russian.

To document and collect evidence at the crime scene; requisite evidence; requires medical examination; evidence collectors; furnishes proof of a crime; evidence furnished by the plaintiff; a secure place; responsible for securing the scene; involves many important steps; recorders to record the data; issues a search warrant; actually occurred; common occurrence.

Activity 3. Choose the correct word from the list to complete each sentence. Translate the sentences into Russian.

responsible	occurrence	secures	collecting
collected	recording	occurs	exchange
document	involved	furnishes	issues

- 1) The goal of a crime scene investigation is to recognize, ____, and collect evidence at the crime scene.
- 2) He is ____ for investigating a scene and ____ evidence. He also ____ the scene.
- 3) To counter this risk, digital forensic investigation firms provide assistance in conducting the forensic analysis after ____ of any cyber crime.
- 4) Even if the ____ does not appear to be very clear or useful, all relevant footage should be ____.
- 5) Jurors often give forensic science more weight, because it is provided by "experts", however, when misconduct ____ the added weight is damaging and can lead to wrongful convictions.
- 6) Punitive measures will be permanently suspended if the person cooperates with the Commission, presents full and valid testimony, and ____ sufficient evidence against other perpetrators.
- 7) The key principle of crime scene investigation is a Locard's ____ concept.
- 8) Who is ____ in a crime-scene investigation?
- 9) A district attorney ____ a search warrant if it is necessary.

⊕ Reading and language study 1

Activity 4. Study the vocabulary and guess what the text is about.

crime scene investigation - расследование места происшествия

to piece together the evidence – сопоставить улики

tedious– длительный, трудоемкий

a cross-transfer of physical evidence - принцип обмена уликами

to issue a search warrant – выдавать ордер на обыск

Activity 5. Scan the text and find out the definitions of crime scene, evidence, professionals of a crime-scene investigation crew.

Basics of crime scene investigation

Crime scene investigation is an essential aspect of the criminal law system. The goal of a crime-scene investigation is to recognize, document, and collect evidence at the scene of a crime. To solve the crime depends on piecing together the evidence and forming a picture of what happened at the crime scene. *Crime scene* is a place where some form of illegal activity, such as a robbery or a murder, happened. There are primary and secondary crime scenes. The *primary crime scene* is where a crime actually occurred. A *secondary crime scene* is an alternate location where additional evidence, something that furnishes proof of a crime and is used in a court of law, may be found.

A crime scene may be a single room, an entire house, everything on a property, or even a whole neighborhood. For example, in a bank robbery, the bank is the primary scene, but the get-away car and the thief's hideout are secondary scenes.

Crime scenes can be classified by:

- location of criminal activity* (indoors, outdoors, vehicle, etc),
- size of the crime* (macroscopic and microscopic),
- type of crime* (homicide, robbery, sexual assault, etc.).

Examination of a crime scene is a long, tedious process that involves many important steps. The key principle of crime scene investigation is a Locard's exchange concept. Edmond Locard (1877-1966), a pioneer in forensic science, considered that when a person comes into contact with an object or another person, a *cross-transfer* of physical evidence (DNA, hair, skin cells, blood, bodily fluids, pieces of clothing, fibers and more) can occur. The exchanged materials indicate that the two objects were in contact.

Who is involved in a crime-scene investigation? The CSI crew is made up of legal and scientific professionals who are responsible for investigating a scene and collecting evidence. Professionals at the scene of a crime may include police officers, detectives, crime-scene investigators, district attorneys, medical examiners, and scientific specialists.

- Police officers are usually the first to arrive at a crime scene. They arrest the perpetrator if he's still there and call for an ambulance if necessary. They are responsible for securing the scene.
- A district attorney issues a search warrant if it is necessary.
- Crime-scene investigators document the crime scene in detail and collect physical evidence. CSIs include recorders to record the data, sketch artists to sketch the scene, photographers to take photos of the crime scene, and evidence collectors.

- Medical examiners may be necessary to determine the cause of death when a homicide has occurred.

- Detectives look for leads by interrogating witnesses and talking to the crime-scene investigators about the evidence.

- Specialists such as forensic scientists and forensic psychologists may be called if the evidence requires their expertise [10; 11; 20].

Activity 6. Scan the text and find out the duties of these professionals.

A police officer, a district attorney, a detective, a forensic scientist, a medical examiner.

Activity 7. Put the words into the correct order and answer the questions.

- 1) what / be / types / crime scene / can / divided?
- 2) how /can /be / crime scenes / classified?
- 3) is / about / Locard`s exchange principle / what?
- 4) what /can / be /sort / examined / of /evidence /by / forensic scientists?
- 5) does /the CSI / crew /who / include?

Activity 8. Revise the text and find out whether the following statements are true, false or doesn`t say.

- 1) Crime scene investigation is a tedious process.
- 2) There are many classifications of crime scene.
- 3) John Carey devised a cross-transfer of physical evidence.
- 4) The key principle of crime scene investigation is DNA fingerprinting.
- 5) A medical examiner arrives at a crime scene and arrests the perpetrator is s/he's still there.
- 6) A district attorney determines if the investigators require any search warrants.
- 7) Forensic audio examiners work with audio recordings.

Think about your own 'true, false or doesn`t say' statements.

- 8) _____
- 9) _____
- 10) _____

Activity 9. Find English equivalents to the following words and word combinations.

- 1) место совершения преступления (первичное) –
- 2) место происшествия (вторичное, дополнительное) –
- 3) раскрывать преступление –
- 4) протоколист –
- 5) художник-криминалист –

- 6) принцип обмена уликами –
- 7) ограбление банка –
- 8) вызвать скорую помощь –
- 9) следственно-оперативная группа –
- 10) допрашивать подозреваемых –
- 11) искать зацепки -

Activity 10. Make up as many sentences as possible using the table below.

Fill in the missing information if necessary.

S	V	O	P
Crime-scene investigators	document	DNA/ footprint examination	in Germany
Field officers	be responsible	the scene	in France
Lab officers	perform	the crime scene	at the crime scene
The CSI crew	conduct	the cause of a death fingerprint identification evidence	at the forensic lab
A district attorney	accepted	a search warrant	
Medical examiners	determine	the recording and subsequent matching of scrupulous measurements of bodily structures	
U.S. courts	involved	a cross-transfer of physical evidence	
The Bertillon method	sketch		
	devised		

Activity 11. Translate the sentences into English

- 1) Место преступления и место совершения преступления – это разные категории в расследовании преступлений.
- 2) Полицейский опросил свидетелей и допросил подозреваемых и преступника.
- 3) Моя основная задача - расследовать преступления.
- 4) Суд.мед.эксперт установил предварительную причину смерти.
- 5) Кто отвечает за сохранение места совершения преступления?
- 6) Принцип обмена Локарда используется в расследовании преступлений.
- 7) Он потребовал ордер на обыск, так как Джон Майлз, подозреваемый, совершил убийство.
- 8) Группа по проведению расследований на месте преступления прибыла незамедлительно по вызову дежурного полицейского.

⊕ Reading and language study 2

Activity 12. Scan the text below and define basic crime scene procedures. What stages are completed by police officers, CSIs and lab officers?



General Crime Scene Procedures

Despite the variation among crime scenes, there is a standard procedure to ensure a scene is handled in an appropriate manner. The 1st stage is the first officer attending. Safety is the primary concern. The first officers arrive on the crime scene, do emergencies, secure the scene and preserve evidence. The second stage of processing is scene analyzing. CSIs take notes and interview witnesses (collect testimonial evidence). Before anything is moved or even touched, the entire scene must be fully documented. The third step is recording the scene. Photography is the most important form of crime scene documentation, producing a permanent visual record of the crime scene and discovered evidence. Objects must not be moved until photographed from all necessary angles. The personnel keep free hand drawings of the crime scene to reconstruct it. All major items of physical evidence and their location in relation to the crime scene must be included in the crime scene sketch. Videography of the crime scene should follow the scene survey. When documentation of the scene is complete, the officers start the search to collect the evidence effectively. Crime scene search patterns may vary but they share a common goal of providing organization and systematic structure to ensure that no items of evidence are missed or lost. There are a number of search patterns that may be followed: a zone search, a line or strip search, a spiral pattern, and a wheel search. The way in which the scene is processed is determined by the nature of the crime. The next stage of processing is the collection of physical evidence. Some evidence is clearly visible, such as weapons, bullet casings, documents. Trace evidence includes smaller items such as hair, tool marks, paint chips, glass fragments, and fibers. Other evidence, such as fingerprints or footprints, is invisible to the eye. CSIs package evidence in sealed bags or envelopes and deliver them to crime labs for analysis and preparation for use in court proceedings. All evidence must be properly packaged, sealed and labeled using specific techniques and procedures, and transported to the forensic laboratory for analysis. Reconstruction of a crime is the final step in the forensic examination process. The goal is to identify or individualize the evidence at the scene. The "how" of the crime scene is more important than the "who" [10; 11; 14].

Activity 13 a. Find English equivalents to the following words and word combinations.

- 1) осмотреть место происшествия -
- 2) основная задача -
- 3) расположение -
- 4) главные предметы -
- 5) вещественные доказательства -
- 6) трассеологические доказательства -
- 7) модели осмотра места происшествия -
- 8) гильзы -
- 9) осколки стекла -
- 10) эскиз места преступления -

13 b. Find Russian equivalents to the following words and word combinations.

- 11) to photograph from all necessary angles -
- 12) to package, seal and label the evidence -
- 13) invisible to the eye -
- 14) reconstruction of a crime -
- 15) individualize the evidence -

Activity 14. Study the part of a student book "Criminalistics" by N.P.Yablokov <http://be5.biz/pravo/k009/20.html> and find Russian equivalents to the following crime scene search patterns. Which one stays unknown?

- 1) a zone pattern -
- 2) a spiral pattern -
- 3) a line or strip search -
- 4) a wheel search -

Activity 15. Skim the text and find all verbs refer to "evidence". What other actions can be done with evidence? Who is responsible for these duties? Make up the sentences using the collocations.

Example: "to preserve evidence"; Police officers are responsible for preserving the crime scene.

Activity 16. Translate the questions into English and answer them.

- 1) Какие стадии расследования места происшествия можно выделить?
- 2) В чем отличие стадии анализа от стадии документирования?
- 3) Видеография позволяет зафиксировать все собранные доказательства, не так ли?

- 4) В чем разница между вещественными доказательствами и свидетельскими показаниями?
- 5) Содержит ли эскиз место преступления все основные улики?
- 6) Почему запрещено передвигать объекты на месте преступления?
- 7) Какая стадия самая трудоемкая?
- 8) Почему необходимо тщательно упаковывать улики?
- 9) Куда отправляют собранные улики?
- 10) На какой стадии подключаются судебные эксперты?

Activity 17. Skim the text and do a mind map to the text.

📌 Youtube Corner

<https://www.youtube.com/watch?v=JgzdhUAJrBA>



Activity 18. a) Watch a video track and fill in the gaps.

From the second 1. _____ is committed, 2. _____ of the crime are left in the environment. The _____ where the crime scene took place can be full of 3. _____ evidence which can link the crime to the 4. _____ and ultimately assist the 5. _____ in their 6. _____. This location is known as a 7. _____. Crime scenes can be anywhere: 8. _____, 9. _____, business premises, domestic dwellings or 10. _____ and no two are ever the same.

b) Watch the video and define:

- 1) the goals of crime investigator,
- 2) a protective clothing,
- 3) common approach path,
- 4) description of documenting the scene,
- 5) environmental factors that may cause harm to crime scene investigation.

c) Match the pieces of clothing with their names. What is odd?

- | | |
|-----------------------------|--------------------|
| a) disposable boot covers | b) latex gloves |
| c) a protective mouth guard | d) an overall suit |



Activity 19. Watch again and tick a true answer. Correct a false one.

1. The key role of CSI is to document the scene and collect evidence carefully.
2. Before starting to collect evidence CSIs interview witnesses.
3. A full set of protective clothing helps them to avoid poisonous substances.
4. CSIs are the first to come at crime scene.

5. Police officers use cordon to protect evidence and not let the mass media to come in.
6. An approach path is a scientific term of stepping plates that CSIs use not to contaminate the scene.
7. Stepping plates are used only at serious crimes.
8. CSI should be more careful with preserving the evidence indoors that outdoors.
9. CSIs never speak to the witnesses and remove furniture at the crime scenes.
10. SCI usually fasten the process of collecting evidence when it snows or rains.
11. Lifting carpets, taping the upholstery and analyzing trace evidence are usual steps in CSI`s job.
12. Crime scenes do have some basic principles in common: cordon, CAP, systematic collection and recovery of evidence.

Activity 20. Nancy Ludwigsen, forensic chemist from Sarasota County Sheriff`s office, is videotaking you through "a day in life of a forensic scientist".

Watch this video episode and find out whether the following statements are true, false or doesn`t say. <https://www.youtube.com/watch?v=bztIYwckmVE>

1. She works with bits of hair, skin, and fibers mostly.
2. She`s been in forensic science for twenty three years.
3. The 1st thing that she does in the morning is checking emails.
4. There is only one way of receiving evidence.
5. Any kind of narcotic analysis can be done in the lab.
6. Everything is tested three times to avoid a wrong result.
7. Reporting is an obligatory part of Nancy`s work.
8. Forensic examination can be evidence for the defense.
9. There is no difference between a chemist and a forensic chemist.

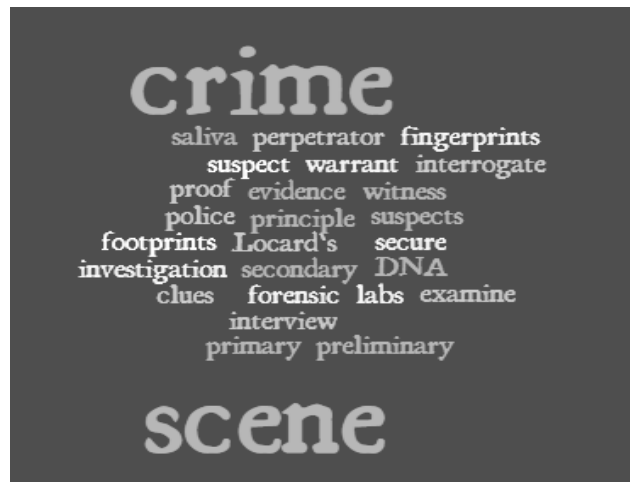
⊕ **Compare & contrast**

Activity 21. Read the articles devoted to general procedures of crime scene investigation in Russian and English using the links. <https://aboutforensics.co.uk/crime-scenes/> and <https://cyberleninka.ru/article/v/etapy-protsessy-rassledovaniya-i-ih-harakteristika>

Use comparing linking expressions as "like", "both", "unlike", "describes/shows", "be focused on" to answer the questions: What stages of crime scene investigation are distinguished by Russian and British scientists? What are the similarities and differences?

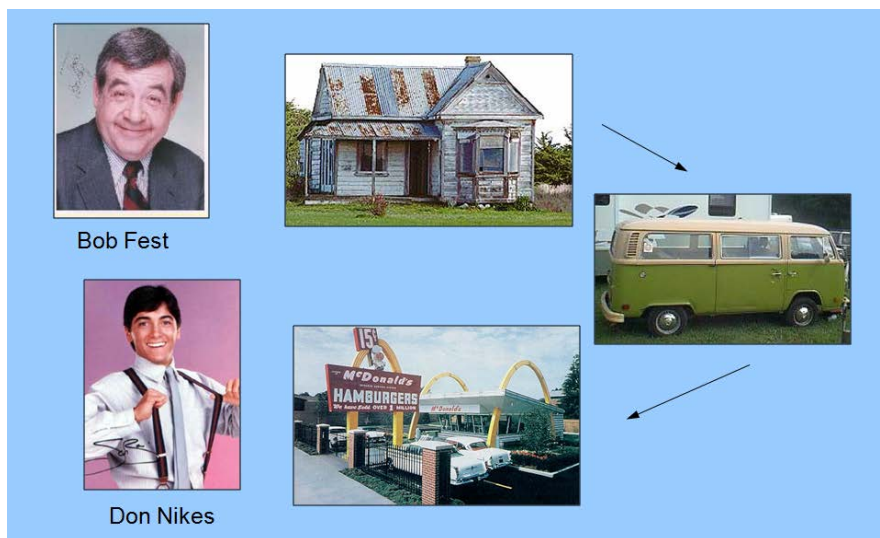
⊕ Speaking

Activity 22. Look at the word cloud and speak about the basis of crime scene investigation.



⊕ Develop your skills

Activity 23. Look at the picture and define the victim (____), the perpetrator (____), the primary (____) and secondary crime scenes (____). Make up a story, describing the picture in pairs. Present it in class.



Activity 23. Using the site below make up the story and present it in class.

<https://www.storyboardthat.com/>

⊕ Glossary

Crime Scene Investigation

Verbs and word combinations

- 1) to collect
- 2) to document
- 3) to furnish
- 4) to involve
- 5) to issue, to issue a search warrant
- 6) to occur
- 7) to record
- 8) to require
- 9) to secure
- 10) to determine the cause of death
- 11) to piece together the evidence
- 12) to solve the crime
- 13) to sketch the scene
- 14) to handle smth in an appropriate manner
- 15) to call for an ambulance
- 16) to do emergencies
- 17) to secure the scene
- 18) to preserve evidence
- 19) to discover evidence
- 20) to put evidence into in sealed bags or envelopes
- 21) to deliver evidence to crime labs

Nouns and word combinations

- 22) a digital forensic investigation firm
- 23) cyber crime
- 24) misconduct
- 25) a primary crime scene
- 26) a secondary crime scene
- 27) a location of criminal activity
- 28) a cross-transfer of physical evidence
- 29) a homicide

Adjectives

- 30) relevant
- 31) tedious
- 32) invisible to the eye

A CSI crew

- 33) a police officers
- 34) a detective
- 35) a crime-scene investigator
- 36) a district attorney
- 37) a photographer
- 38) a sketch artist
- 39) a recorder
- 40) a medical examiner
- 41) a scientific specialist

Search patterns

- 42) a zone search
- 43) a line or strip search
- 44) a spiral pattern
- 45) a wheel search

Trace evidence

- 46) smaller items as hair, tool marks, paint chips,
- 47) glass fragments, and fibers

General Crime Scene Procedures

- 48) the first officer attending
- 49) the scene analyzing
- 50) the scene recording
- 51) videography
- 52) the search
- 53) the collection of physical evidence
- 54) reconstruction of a crime

Protective clothing

- 55) overall suit, protective mouth guard, latex gloves
- 56) disposable boot covers
- 57) latex powder-free gloves

Toolkit

- 58) evidence collection tweezers
- 59) evidence collection containers
- 60) CSI evidence knife
- 61) evidence ID labels
- 62) 'Warning/Police Seal-Do not Remove' (red)
- 63) evidence collection kit
- 64) evidence plastic bags

⊕ Check yourself

Activity 24. Translate the following words and word combinations. Which of them will help you to describe the pictures.

- | | |
|-------------------------------------|-------------------------------------|
| 1) расследование места преступления | 1) law enforcement officials |
| 2) анализировать место преступления | 2) to document and collect evidence |
| 3) вещественные доказательства | 3) identifying potential evidence |
| 4) принцип обмена Локарда | 4) to contaminate the scene |
| 5) возможные подозреваемые | 5) conduct scientific experiments |



Activity 25. Study the list of questions. How many can you answer?

1. What did Edmond Locard develop?
2. Does a CSI or a forensic scientist visit crime scenes to collect evidence, and spend a significant portion of the workday on their feet?
3. What types can crime scene be divided into?
4. What does a day in life of a forensic scientist include?
5. How is physical evidence collected?
6. What are the procedures of crime scene investigation?
7. Who is included in a CSI team? What functions do they perform?
8. CSI usually conduct a DNA analysis, don't they?
9. What does a forensic or SCI's protective suit consist of?
10. Can forensic examination be evidence for the defense?

Activity 26. Translate the following sentences.

- 1) The work of (судебного эксперта) allows (выявлять подозреваемых), prove or disprove (другие доказательства) based on (собранные улики).
- 2) Much attention is given to (высокотехнологичное оборудование).
- 3) He required (ордер на обыск) as Jones Miles (подозреваемый, совершил убийство).
- 4) What is the difference between (вещественные доказательства) и (свидетельскими показаниями)?
- 5) There are two types of (место преступления): (первичное) and (вторичное).

EXTRA TASKS

UNIT I

Activity 1. Choose one of the cards. Study your role and dramatize the interview.

Card 1. You are a journalist writing an article about a famous forensic anthropologist Clea Koff. Her work with the United Nations-based Criminal Tribunal for Rwanda was the main in identifying and bringing some of the genocide offenders to trial.

Task: arrange an appointment with Clea Koff and ask about her career of a forensic scientist, the role of it in her research and the skills that helped her in identifying the victims of genocide in Bosnia in 1995.

Card 2. You are a famous forensic anthropologist Clea Koff. Your book 'The Bone Woman: Among the dead in Rwanda, Bosnia, and Croatia' was a great success.

Task: agree to have an appointment with a journalist and answer his questions.

Card 3. You are a 2nd year student of law faculty. You`re fond of forensic science a lot and have a wonderful opportunity to ask a famous forensic anthropologist Clea Koff questions about role of forensic science in the world and the areas of its use.

UNIT II

Activity 1. Study new inventions of the 20th-21st centuries. Make up sentences using the Passive Voice.

New inventions in XXI century in forensic science

1987	<p>DNA catches the criminal</p> <p>Tommy Lee Andrews, a rapist, was convicted of a series of sexual assaults by using DNA profiling.</p>
1996	<p>DNA evidence certified</p> <p>National Academy of Sciences announces DNA evidence is reliable.</p>
1999	<p>Faster fingerprint IDs</p> <p>FBI establishes the integrated automated fingerprint identification system, cutting down fingerprint inquiry response from two weeks to two hours.</p>
since 2000	<p>3D reconstruction programs</p> <p>Computer graphics are now used to create compelling visual evidence to clarify the events of a crime for jurors. 3D reconstructions of crime scenes and traffic collisions (столкновения) are all used to solve crimes. Forensic science will continue to develop the power of its techniques to deliver justice through logic and science.</p>
2001	<p>Faster DNA IDs</p> <p>Technology speeds up DNA profiling time, from 6-8 weeks to between 1-2 days.</p>
2007	<p>Footwear detection system</p> <p>Britain's Forensic Science Service develops online footwear coding and detection system. This helps police to identify footwear marks quickly.</p>
2008	<p>Detection after cleaning</p> <p>A way for scientists to visualize fingerprints even after the print has been removed is developed, relating to how fingerprints can corrode metal surfaces.</p>
2011	<p>Facial sketches matched to photos</p> <p>Michigan state university develops software that automatically matches hand-drawn facial sketches to mugshots (снимки преступников) stored in databases.</p>
2011	<p>4 second dental match</p> <p>Japanese researchers develop a dental x-ray matching system. This system can automatically match dental x-rays in a database, and makes a positive match in less than 4 seconds.</p>

UNIT III

Activity 1. Study the list of professions given at <https://thebestschools.org/careers/criminal-justice-jobs/> and fill in the table.

1. специалист отдела безопасности банковских карт/ аналитик по противодействию мошенничеству с банковскими картами	
2. следователь по уголовным делам	
3. бухгалтер-криминалист	
4. эксперт криминалистической лаборатории	
5. эксперт в области ДНК	
6. психолог-криминалист	
7. специалист в области компьютерных/ цифровых технологий	
8. помощник юриста по уголовным делам	

Activity 2. Using the professions from the activity 1, fill in the gaps.

1. ____ analyses odd or fraudulent patterns surrounding customer accounts.
2. ____ analyzes evidence collected by ____.
3. ____ is a legal assistant.
4. ____ deals with digital evidence
5. ____ produces a portrait or psychological profile of a perpetrator.
6. ____ studies financial records to find suspicious transactions.
7. ____ examines DNA samples with traces from the clothing of victims and crime scenes.
8. ____ uncovers and restores lost or hidden files.

UNIT IV

Activity 1. Scan the text and answer the question: What items are used by lab officers?

Tool kit for a forensic scientist

Forensic investigators find, methodically collect, take photos and document the crime scene, protect and transport evidence from it. Forensic scientists have no contact with witnesses, suspects or others. Their role is purely collection and analysis of evidence. There are typical tools or kits that all forensic scientists use.

Safety is the major principle of forensic scientists. They should be extremely careful when handling any evidence (chemical) and use rubber gloves to protect their hands and be careful of the clothing, shoes, tools, etc. which could transfer to their vehicle, office and home.

Activity 1. Look at the picture below match the images with definitions.

Contents of evidence collection kit:



- latex powder-free gloves
- evidence collection tweezer
- evidence collection containers
- CSI evidence knife
- evidence ID labels
- 'Warning/Police Seal-Do not Remove' (red)
- evidence collection kit
- evidence plastic bags

Activity 2. Match the forensic tools with their functions.

- | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><i>a crime scene tape</i></p> <p><i>a camera and a film</i></p> <p><i>a sketchpad and pens</i></p> <p><i>overall suits, face masks and gloves</i></p> <p><i>a torch, or other light sources</i></p> <p><i>tweezers</i></p> <p><i>a magnifying glass</i></p> <p><i>cotton wool buds</i></p> | <p>→</p> | <p>to secure the scene and the around area;</p> <p>to collect evidence such as hair and fibres;</p> <p>to establish positive fingerprint identification;</p> <p>for making casts of shoe/footwear prints, animal prints, tyres and tool markings;</p> <p>for collecting samples of fluid evidence;</p> <p>not to contaminate the items;</p> <p>for handling hazardous materials (опасные материалы)/evidence;</p> <p>for scene sketches;</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

fingerprint supplies to label evidence and keep evidence uncontaminated;
hazard kit (набор для работы с опасными материалами) to help with finding trace evidence;
casting kit (набор для изготовления слепков) to uncover certain types of evidence;
to photograph scene and evidence.

Activity 3. What are the functions of these items? Use the example.

Latex powder-free gloves are used to take pieces of evidence for the examination.

EXTRA READING

Duties of the forensic scientist

A

Now we can identify forensic scientist's duties as follows:

1. Examine material collected or submitted in order to provide information previously unknown or to corroborate information already available.
2. Provide the results of any examination in a report that will help the investigator to identify an offender or corroborate other evidence to prepare a case for presentation to a court.
3. Present written and/or verbal evidence to a court to enable it to reach a right decision as to guilt or innocence.

It is essential for the scientist to be able to demonstrate competence, impartiality and integrity by attention to issues such as the following:

1. The scientist should only give evidence on work which he/she carries out personally or under a direct supervision.
2. The methods which are used in an investigation should be based on established scientific principles and validated.
3. It is important to realize that the responsibilities of the individual forensic scientist are personal and not corporate. So, in giving evidence he or she is completely responsible for their own experimental results and for the opinions which he or she expresses.

B

Having established when the service of a forensic scientist could be required their duties can now be identified as follows:

1. Examine material collected or submitted in order to provide information previously unknown or to corroborate information already available.
2. Provide the results of any examination in a report that will enable the investigator to identify an offender or corroborate other evidence in order to facilitate the preparation of a case for presentation to a court.
3. Present written and/or verbal evidence to a court to enable it to reach an appropriate decision as to guilt or innocence. In the United Kingdom, the United States of America and many other parts of the world the individual forensic scientist may be regarded as, and claimed to be, an independent witness for the court but may not always be so regarded.

It is essential therefore for the scientist to be able to demonstrate competence, impartiality and integrity by attention to issues such as the following:

1. The scientist should only give evidence on work carried out personally or under direct supervision. However, an expert witness can interpret factual evidence given by another witness under oath in the light of scientific findings and knowledge.

2. Where scientific examinations are relied on for legal purposes the methods used should be based on established scientific principles, validated and, preferably, published in reputable scientific literature.

3. Where the scientific findings require interpretation the basis of any interpretation should be available to the scientific community. It is important to recognize that the responsibilities of the individual forensic scientist are personal and not corporate. Thus in giving evidence he or she is completely and solely responsible for their own experimental results and for the opinions expressed. However the corporate environment will usually be a supportive structure to provide appropriate training, standardized methods and procedures, evaluation of performance and a quality management system [11].

Computer forensics specialist

In recent years, computer forensics has grown to be increasingly important as computers have become more pervasive in modern society. It is, according to some experts, one of the fastest growing areas of forensics. The experts who work in this field are known Computer forensics specialists. Their job is to examine digital evidence. They isolate, remove, preserve, analyze, and keep a record of data that has been stored or encrypted on computer media. They inspect computer hard drives as well as other computer media such as CD-ROMs, zip disks, personal digital assistants (PDAs), flash memory cards, portable media players, and cellular telephones.

Many law enforcement agencies have computer crime units, or a high-technology crime units, that are responsible for investigating computer and computer-related crimes.

Computer forensics specialists who work in these special details may be law enforcement officers or civilians. They examine data from computers found at crime scenes to uncover potential evidence that may lead to the arrest and conviction of suspected criminals.

These specialists are involved in the investigation of such crimes as theft of computer systems, trade secrets, and information assets (data), as well as the destruction or damage of computer files. They also conduct or assist in investigations in which computers were used to commit, plan, or document crimes such as credit fraud, identity theft, kidnapping, rape assault, arson, and terrorism. In addition, they provide assistance to other law enforcement officers with preparing search warrants to seize computers, as well as with the proper handling of that equipment. Furthermore, they may assist in collecting and processing evidence at crime scene.

Some Computer forensics specialists work in the private sector, where they offer their forensic services to various individuals and groups. Some of them are employed as staff members of organizations, while others work as forensic consultants or as private investigators.

Expert Witness # 2 - Dr. Lillian Tuesdays

Dr. Lillian Tuesdays is a forensic scientist. She has a Ph.D. in Chemistry. She has been employed by the JNB Forensic Lab for twelve years, and has worked in the fingerprinting department for that entire period. She examined the vehicle in question on October 11, 2017. She has found that most of the fingerprints on the interior of the vehicle had been wiped clean. However, she did find one full print on the back of the steering wheel. After police officers made an arrest, they gave her the fingerprint of their suspect, Clark Jameson. That fingerprint perfectly matched the fingerprint on the steering wheel of the Explorer. She said that it was likely that the person who had left the fingerprint was behind the wheel of the vehicle. In addition, she found a partial print on the outside of the passenger-side door. She said that that fingerprint was likely left by a passenger when he or she left the vehicle. That print was consistent with the fingerprint of Robert Noonly. She also said that she did not find any usable fingerprints on the stick found at the scene by Constable Dan McForden. On cross-examination, she said that she admitted the placement of Clark Jameson's fingerprint on the back of the steering wheel does not prove that he was driving the vehicle at any time. She admitted that it was possible that the print could have been left at any point during the night whether Clark was driving or not.

REVISION



How many
questions can you
answer?

1. What does the term "forensic science" mean in Russia and the UK?
2. What are three the most important discoveries in the sphere of forensic science in your opinion?
3. Who is Edmond Locard and what's his contribution to forensic science?
4. What can forensic science make a contribution to?
5. When is forensic science required?
6. What are the main duties of the forensic scientist?
7. What separate branches of forensic science are there in the UK?
8. What three questions should be answered in investigation?
9. What helps to identify the identity of criminal / victim?
10. What are the main differences between lab officers and field officers (working environment, duties, risks)?
11. What types can a crime scene be divided into? What's the difference between them?
12. What can a crime scene be classified by?
13. What professionals are responsible for investigating a scene and collecting evidence?
State their main duties.
14. State the general crime scene procedures.
15. Describe a CSI's suit.
16. Describe a tool kit for a forensic scientist. What are these tools used for?
17. State the main duties of forensic economists and types of cases they deal with.
18. Talk about experience, special skills, personality traits which forensic economists should have.
19. State the main duties of computer forensic specialists and types of cases they deal with.
20. Talk about experience, special skills, personality traits which computer forensic specialists should have.

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